
Appendix A

Director Generals Requirements

Table A.1 DIRECTOR-GENERAL REQUIREMENTS COMPLIANCE TABLE

	Matters to be addressed	Section within DGR's	Detail	Location within SIS (Chapter)	TSC Act Section 109/110
The proposal and surrounding areas	Topographic map of the locality showing the proposed development, areas of significance for threatened species and high human activity	1.1	A topographic map of the locality at the most detailed scale available should be provided. This map should detail the route of the transmission line, the locations of pilons, any access roads or ancillary structures, any locally significant areas for threatened species such as parks and reserves, and areas of high activity such as townships, regional centres and major roads.	Chapter 1, Figure 1.2 EIS Figure 4	
	The Proposed Development	1.2	A species impact statement must include a full description of the action proposed, including its nature, extent, location, timing and layout and, to the fullest extent reasonably practicable, the information referred to in this section. The type of action proposed shall be detailed, including the timetable for the carrying out of the proposed clearing and the number of hectares affected. This shall include details of the location of any auxiliary infrastructure such as water storage areas, roads and stockpiles.	Chapter 1, Section 1.3.1 EIS Chapter 4	Section 110(1)
	Map of the vegetation communities in the study area	1.3	A plan of the subject area will be provided. This plan will show the location and type of vegetation communities present within the subject area and the scale of the plan.	EIS Figures 6a-6o	

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	Matters to be addressed	Section within DGR's	Detail	Location within SIS (Chapter)	TSC Act Section 109/110
	Aerial photograph of the subject site, study area and locality	1.4	A colour aerial photograph of the locality (or reproduction of such a photograph) shall be provided. This aerial photograph should clearly show the subject site and the scale of the photograph.	EIS Project Route Plans 1-42	
Initial site assessment	List of subject species	1.5	A list of subject species shall be provided. In determining these species, consideration shall be given to the habitat types present within study area, recent records of threatened species in the locality and the known distribution of threatened species. Databases such as the NPWS Atlas of NSW Wildlife and information from the Royal Botanic Gardens and Australian Museum may be used to assist in compiling the list.	Chapter 2, Section 2.1	
Endangered ecological communities	Definition	1.6	In defining the study area consideration shall be given to possible indirect effects of the action on the area surrounding the subject site, for example, altered hydrological regimes or increased predation pressure due to improved access or conditions for feral predators, such as foxes.	Chapter 2, Section 2.1.1	

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	Matters to be addressed	Section within DGR's	Detail	Location within SIS (Chapter)	TSC Act Section 109/110
	Description	1.7	In describing the study area, consideration shall be given to the previous land uses and the effect of such land uses on the study area. Relevant historical events may include fire history, cropping and other agricultural activities.	Chapter 2, Section 2.1.2	
	Habitat analysis	1.8	A description of fauna habitat components such as the frequency of tree hollows, presence of logs and groundcovers, density and structure of vegetation, soil types and presence of water points etc. within the study area shall be given. The condition of the habitat within the study area shall be discussed, including the prevalence of introduced species. Where relevant the habitat of the subject species shall be described with particular reference to the various components of their habitat (ie. feeding, roosting, nesting etc.).	Chapter 3, Section 3.3.2	
Threatened species survey methods	Introduction	1.9	A fauna and flora survey is to be conducted in the study area. Targeted surveys shall be conducted for all subject species where suitable habitat for these has been identified as occurring within the study area. Species of taxonomic uncertainty shall be confirmed by a recognised authority such as the Australian Museum for animals and the Royal Botanic Gardens for plants.	Chapter 3, Section 3.1	

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	Matters to be addressed	Section within DGR's	Detail	Location within SIS (Chapter)	TSC Act Section 109/110
	Flora Field Surveys	1.10	A full description of the methodology used in the fauna and flora surveys and habitat assessment shall be provided, including survey techniques and effort employed, number and location of traps, size of survey sites, dates of surveys, the time spent on surveys and weather conditions. Surveys should be undertaken during seasons and climatic conditions during which the subject species are most likely to be detected. Flora survey will be conducted in the spring and the subject area will be "spelled" from grazing for a period no less than one month prior to the survey. Each proposed pilon site will need to be surveyed for threatened flora.	Chapter 3, Section 3.2.3	

Table A.1 DIRECTOR-GENERAL REQUIREMENTS COMPLIANCE TABLE

	Matters to be addressed	Section within DGR's	Detail	Location within SIS (Chapter)	TSC Act Section 109/110
	Fauna field survey	1.10	A full description of the methodology used in the fauna and flora surveys and habitat assessment shall be provided, including survey techniques and effort employed, number and location of traps, size of survey sites, dates of surveys, the time spent on surveys and weather conditions. Surveys should be undertaken during seasons and climatic conditions during which the subject species are most likely to be detected. Flora survey will be conducted in the spring and the subject area will be "spelled" from grazing for a period no less than one month prior to the survey. Each proposed pilon site will need to be surveyed for threatened flora.	Chapter 3, Section 3.3.3	
	Habitat analysis	1.11	Any areas that may act as corridors or habitat links between the study area and adjacent areas of likely habitat for subject species shall be identified and described.	Chapter 3, Section 3.3.2	
	Limitations of surveys	1.13	The effect of the season and weather shall be considered with respect to the results of the survey.	Chapter 3, Section 3.5	
	Introduction	1.14	The methodology of surveys is the responsibility of the consultant and as stated in 1.12 above must be fully documented in the SIS. Suggested methodologies for certain aspects of the field survey are:	Chapter 3, Section 3.1	

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	Matters to be addressed	Section within DGR's	Detail	Location within SIS (Chapter)	TSC Act Section 109/110
			- the study area should be stratified to reflect natural variation across the area and the intensity of direct and indirect effects as a result of the proposed development. - a map of the attributes (e.g., vegetation) used to stratify the study area should be included. - each unit of land delineated by the stratification should be sampled for flora and fauna. - survey effort should be concentrated on, but not restricted to, those areas likely to be most impacted on by direct and indirect effects of the development. - The <i>Interim Guidelines for Targeted and General Flora and Fauna Surveys under the Native Vegetation Conservation Act 1997</i> (NSW DLWC 1999) provide a guide as to the minimum survey effort required.	EIS Figures 6a-60	
The habitat of threatened species	Location of recorded threatened species in the study area	1.15	The location of any threatened species recorded during the SIS survey shall be represented on a map of the study area.	Chapter 3 Figures 3.2 and 3.3 Chapter 4, Section 4.5.1 EIS Figures 6a-60	

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	Matters to be addressed	Section within DGR's	Detail	Location within SIS (Chapter)	TSC Act Section 109/110
	Plant communities	1.16	A description of the habitats occupied within the region by each of the subject species should be provided. This description should include not only floristic and structural information but also information on the condition of the habitats.	Chapter 4, Section 4.5	
	Fauna habitat	1.16	A description of the habitats occupied within the region by each of the subject species should be provided. This description should include not only floristic and structural information but also information on the condition of the habitats.	Chapter 4, Section 4.5	
	Plant communities	1.17	In the same way, a description of the habitats occupied within the study area by each of the subject species should be provided. A comparison of the available habitats within the study area in relation to the region should then be undertaken.	Chapter 4, Section 4.5	
	Fauna habitat	1.17	In the same way, a description of the habitats occupied within the study area by each of the subject species should be provided. A comparison of the available habitats within the study area in relation to the region should then be undertaken.	Chapter 4, Section 4.5	
	Map of subject species' habitat	1.18	The habitat of each of the subject species within the study	EIS Figures 6a-	

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	Matters to be addressed	Section within DGR's	Detail	Location within SIS (Chapter)	TSC Act Section 109/110
			area shall be represented on a map.	60	
	Flora of conservation significance	1.19	An effort should be made to determine the distribution of the local population.	Chapter 7	
	Fauna species	1.19	An effort should be made to determine the distribution of the local population of each threatened species recorded from the study area.	Chapter 7	
	Plant communities	1.20	The condition of the habitats should be determined, described and recorded e.g. structural complexity of the vegetation, evidence of grazing/ browsing damage, presence of flora species susceptible to grazing, fire history. The condition and regional distribution of similar habitats outside the study area should also be recorded.	Chapter 7	
	Fauna habitat	1.20	The condition of the habitats should be determined, described and recorded e.g. structural complexity of the vegetation, evidence of grazing/ browsing damage, presence of flora species susceptible to grazing, fire history. The condition and regional distribution of similar habitats outside the study area should also be recorded.	Chapter 7	

Table A.1 DIRECTOR-GENERAL REQUIREMENTS COMPLIANCE TABLE

	Matters to be addressed	Section within DGR's	Detail	Location within SIS (Chapter)	TSC Act Section 109/110
Matters of social and economic impact	Economic impacts	1.21	The economic costs likely to be incurred and the benefits likely to accrue to the proponent as a result of this development shall be addressed in the SIS. This shall include a discussion of the sensitivity of the analysis to any assumptions made in the calculation of the benefits/costs.	Chapter 5, Section 5.2 EIS Chapter 7	
	Social impacts	1.22	An evaluation of the social consequences of the development shall be carried out. This will consider who gains and who loses from the action and where those people are located, i.e. distributional considerations. Social impacts may include those that affect the net welfare of society and those that impact on the individual or group.	Chapter 5, Section 5.3 EIS Chapter 7	
Matters of ecologically sustainable development	Ecologically sustainable development principles	1.23	The principles of ecologically sustainable development are described in section 6(2) of the Protection of the Environment Administration Act 1991. The SIS must seek to demonstrate how this development satisfies these principles or how the development could be modified to address these principles.	Chapter 6, Section 6.1 EIS Chapter 3	
	Ecologically sustainable development principles in a regional context	1.24	The regional context of the effects of this development on the ESD principles i.e. off-farm must also be considered.	Chapter 6, Section 6.2 EIS Chapter 3	

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	Matters to be addressed	Section within DGR's	Detail	Location within SIS (Chapter)	TSC Act Section 109/110
Assessment of likely impacts	Impacts of the proposed development	2.1	A general description of the threatened species or populations known or likely to be present in the area that is the subject of the action and in any area that is likely to be affected by the action and an assessment of which threatened species or populations known or likely to be present in the area are likely to be affected by the action. For all subject species, the SIS shall state the following: • the location, nature and extent of habitat removal or modification which may result from the proposed action; • the potential impact of the removal of habitat on the species, population or ecological community; and • the likely contribution of the proposed action to the threatening processes acting on populations of those species in the locality. • measures proposed to ameliorate the impacts of the proposal. • the extent to which the proposal is consistent with relevant, draft or approved Recovery Plans or Threat Abatement Plans.	Chapter 7	Section 110(2)(a)(b)

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	Matters to be addressed	Section within DGR's	Detail	Location within SIS (Chapter)	TSC Act Section 109/110
Content of species impact statements	Impacts of the proposed development (conservation status)		For each species or population likely to be affected, details of its local, regional and State-wide conservation status, the key threatening processes generally affecting it, its habitat requirements and any threat abatement plan applying to it.	Chapter 7	Section 110(2)(c)
Assessment of likely impacts	Impacts of the proposed development (regional abundance and locality abundance)	2.2	An estimate for the local and regional abundance of those species or populations. A discussion of other populations of threatened species in the region shall be provided. The long term security of the other habitats shall be examined as part of this discussion. The relative significance of the subject site for subject species in the local context shall be provided.	Chapter 7	Section 110 (2)(d)
Content of species impact statements	Impacts of the proposed development (impact assessment: assessment of impacts to habitat)(extent of habitat removal and conservation by proposal)		A full description of the type, location, size and condition of the habitat (including critical habitat) of those species and populations and details of the distribution and condition of similar habitats in the region.	Chapter 7	Section 110(2)(f)
	Impacts of the proposed development (impact assessment: assessment of impacts to habitat)(consideration of habitat corridors and connectivity)		If movement corridors for subject species are present within the subject site, the impact of the proposal on these areas shall be discussed.	Chapter 7	

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	Matters to be addressed	Section within DGR's	Detail	Location within SIS (Chapter)	TSC Act Section 109/110
Content of species impact statements	Impact of the proposed development (description)		A general description of the ecological community present in the area that is the subject of the action and in any area that is likely to be affected by the action.	Chapter 8	Section 110(3)(a)
	Impact of the proposed development (conservation status)		For each ecological community present, details of its local, regional and State-wide conservation status, the key threatening processes generally affecting it, its habitat requirements and any recovery plan or any threat abatement plan applying to it.	Chapter 8	Section 110(2)(b)
	Impact of the proposed development (Impact assessment:assessment of impacts to habitat)		A full description of the type, location, size and condition of the habitat of the ecological community and details of the distribution and condition of similar habitats in the region.	Chapter 8	Section 110(2)(c)

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	Matters to be addressed	Section within DGR's	Detail	Location within SIS (Chapter)	TSC Act Section 109/110
Amelioration	Mitigation measures and long term management strategies	3.1	A description of any feasible alternatives to the action that are likely to be of lesser effect and the reasons justifying the carrying out of the action in the manner proposed, having regard to the biophysical, economic and social considerations and the principles of ecologically sustainable development. In discussing alternatives to the proposal, and the measures proposed to mitigate the effect of the proposal, consideration shall be given to developing long term management strategies to protect areas within the study area which are of particular importance for the subject species. This may include proposals to restore or improve habitat.	Chapter 9	Section 110(2)(h)
	On-going monitoring programs	3.2	A full description and justification of the measures proposed to mitigate any adverse effect of the action on the species and populations, including a compilation (in a single section of the statement) of those measures. Any proposed on-going monitoring of the effectiveness of the mitigation measures shall be provided.	Chapter 9	Section 110(2)(i)

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	Matters to be addressed	Section within DGR's	Detail	Location within SIS (Chapter)	TSC Act Section 109/110
Additional Information	List of additional approvals	4.1	A list of any approvals that must be obtained under any other Act or law before the action may be lawfully carried out, including details of the conditions of any existing approvals that are relevant to the species or population. In providing a list of other approvals the following shall be included; • any consent required under Part 4 of the Environmental Planning and Assessment Act 1979 including the name of the consent authority and when it is proposed to make the development application; or • any approvals required under Part 5 of the Environmental Planning and Assessment Act 1979 including the name of the determining authority(ies), the basis for the approval and when these approvals are proposed to be obtained.	Chapter 10 EIS in various areas	Section 110(2)(j)

Appendix B

Results of Flora Survey

Table B.1 RESULTS OF FLORA SURVEY FOR TOWERS 15-176 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common name	Tower number where quadrat was located																				
			15	16	17	56	57	58	83	84	85	86	87	88	89	90	91	117	162	164	175	176	
Trees																							
Cupressaceae	Callitris endlicheri	Black Cypruss Pine		2		1	1	5	4	4	3	4	5	6	1	5			1	5	5	5	
Casuarinaceae	Allocasuarina gymnanthera					5	3	1															
	Allocasuarina luemannii	Bull Oak																					
	Acacia verticillata	Drooping she-oak								2	6	2	2										
Fabaceae	Acacia implexa	Hickory Wattle			1				2	3		2		1	1	1	1	1		3			
Myrtaceae	Angophora floribunda	Rough-barked Apple							3	1	1				1		5		1				
	Eucalyptus agglomerata	Blue Top Stringy Bark						1															
	Eucalyptus albens	White Box	5																				
	E. blakelyi	Blakely's Red Gum				adj											5	1					

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Family	Scientific Name	Common name	Tower number where quadrat was located																			
			15	16	17	56	57	58	83	84	85	86	87	88	89	90	91	117	162	164	175	176
	<i>E. bridgesiana</i>								3													
	<i>E. crebra</i>	Narrow-leaved Ironbark					2															
	<i>E. dealbata</i>	Tumble-down Red Gum																				
	<i>E. dwyeri</i>	Dwyers Red Gum					1	3														
	<i>E. fibrosa</i>	Broad-leaved Ironbark				5		5														
	<i>E. ?goniocalyx</i>	Long-leaved Box																				
	<i>E. macrorhyncha</i>	Red Stringybark																	1			
	<i>E. melliodora</i>	Yellow Box													1							
	<i>E. microcarpa</i>	Inland Grey Box			1												5					
	<i>E. polyanthemos</i>	Red Box																5	1	5	5	
	<i>E. punctata</i>	Grey Gum																				

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Family	Scientific Name	Common name	Tower number where quadrat was located																			
			15	16	17	56	57	58	83	84	85	86	87	88	89	90	91	117	162	164	175	176
Sterculiaceae	E. rossii	Inland Scribbly Gum					1															
	E. sparsifolia	Narrow-leaved Stringybark																			x	
	Brachychiton populnea	Kurrajong								1	2									1		
Shrubs																						
Asteraceae	Cassinia arcuata	Sifton Bush	adj	2	3	3	2	2	2	2		2		1	2	3	2	1	1	3	2	1
	C. sp.		2		adj																	
Dilleniaceae	Olearia microphylla					1																
	Hibbertia obtusifolia					2			2	2	2	2	1	1	2	2			3	3	1	1
	H. serpyllifolia						adj															
Epacridaceae	Astroloma humifusum	Cranberry Heath		2					2	1		1	1	1	3	2						
	Brachyloma							2														

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			15	16	17	56	57	58	83	84	85	86	87	88	89	90	91	117	162	164	175	176
	daphnoides																					
	Leucopogon microphyllus							1														
	Leucopogon muticus					3		5														
	Lissanthe strigosa	Peach Heath			1	1	1												2			2
	Melichrus urceolatus						1	1	1	2		2	3		3	2			1	1		1
	Styphelia triflora					2	3	2	1		1	1			1	1						
Euphorbiaceae	Phyllanthus hirtellus					2	2													1		1
Fabaceae	Daviesia genistifolia																	2				
	D. ulicifolia	Gorse Bitter Pea				1																
	Dillwynia juniperina	Prickly Parrot Pea																				
	D. parvifolia					1	2	1														
	Gompholobium huegelii							1														

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			15	16	17	56	57	58	83	84	85	86	87	88	89	90	91	117	162	164	175	176
	Indigofera																		1			
	adesmiifolia																					
	Swainsona																					
	galegifolia																					
	Acacia vestita																2					
	A. brownii															1						
	A. decora			2	1											2		adj		2		
	A. flexifolia																				2	
	A. gladiiformis					1	2	1														
	A. lanigera						adj															
	A. montana			1	1																	
	A. penninervis																					
	var. penninervis										1			1					1	2		
	A. ulicifolia						1	1														
	A. uncinata							adj														
	A. verniflua	Varnish Wattle			adj																	
	Leptospermum parvifolium	Small- leaved Tea Tree					3	2	adj													

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			15	16	17	56	57	58	83	84	85	86	87	88	89	90	91	117	162	164	175	176
Myrtaceae	Melaleuca thymifolia	Thyme Honey-myrtle															2	1				
	Bursaria spinosa					1					2	1							3			
	Grevillea ?sericea					2	2	2														
	G. triternata					2	1															
	Hakea dactyloides						3	1														
Proteaceae	Persoonia linearis	Narrow-leaved Geebung	adj			3	5	3			1			1		2						
Rosaceae	*Rosa rubiginosa	Briar Rose																				
	Leptomeria sp.								2		1	2		2		3	3					
	Dodonaea boroniifolia								adj													
Sapindaceae	D. viscosa ssp. cuneata		1		adj																	
	D. viscosa ssp. spatulata																		2			
Sterculiaceae	Cryptandra amara				1	1														3		
Thymeliaceae	Pimelea curviflora var. sericea				1																	

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			15	16	17	56	57	58	83	84	85	86	87	88	89	90	91	117	162	164	175	176
Xanthorrhoeaceae	Xanthorrhoea glauca ssp. angustifolia	a Grass Tree																				
Herbs - Ferns																						
Sinopteridaceae	Cheilanthes distans	Rock Fern																				
	C. sieberi	Mulga Fern	adj	4					1	2	2	2	2	2				2	1			
Herbs - Dicots																						
Amaranthaceae	*Alternanthera sp. A																					
Apiaceae	Hydrocotyle laxiflora										1				adj		adj					
	Brachycome multifida																1					
	Bracteantha viscosa	a Paper Daisy							2	2		adj			2	2						
Asteraceae	Calotus cuneata	Blue Burr-daisy	2	3															1			
	C. lappulacea	Yellow	3								2				2							

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			15	16	17	56	57	58	83	84	85	86	87	88	89	90	91	117	162	164	175	176
		Burr-daisy																				
	*Carduus pycnocephalus	Slender Thistle	1																			
	*Carthamus lanatus	Saffron Thistle																				
	*Chondrilla juncea	Skeleton Weed																				
	Chrysocephalum apiculatum	Yellow Buttons			adj				2	2			1			2						
	C. semipapposum												3	4	2	3						
	*Cirsium vulgare														adj							
	*Conyza sp.	a Fleabane													3		2					
	Cymbonotus lawsonianus									2												
	*Facelis retusa			3																		
	Bracteantha viscosa	Sticky Everlasting				2	2		adj			2	2									
	*Galinsoga parviflora										1		1									
	Glossogyne tannensis			1																		

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			15	16	17	56	57	58	83	84	85	86	87	88	89	90	91	117	162	164	175	176
Boraginaceae	*Hypochaeris radicata	Flatweed			2										2	1	2		1			
	*Lactuca seriola																					
	Podolepis neglecta									2		2	2	1	2	4						
	Senecio ?hispidulus																1					
	*Senecio madagascariensis								1								1					
	?Sigesbeckia orientalis																					
	Solenogyne bellioides																	1				
	*Sonchus oleraceus	Sow Thistle	2																			
	Vittadinia pterochaeta		4						1		2				2	3						
	V. muelleri		1																			
	Cynoglossum australe														1							
	*Echium plantagineum	Patterson's Curse																				

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Brassicaceae	*Lepidium africanum								1													
	*Sisymbrium officinale	Hedge Mustard																				
Cactaceae	*Opuntia stricta	Prickly Pear									1		1						2	1		
Campanulaceae	Wahlenbergia gracilis	Small Bluebell																	1		x	1
	W. communis												1		1							
Caryophyllaceae	W. stricta ssp. alterna										2		1									
	W. stricta				1																	
	W. sp.								1	1				2						1		
	*Cerastium glomeratum	Mouse-eared Chickweed																				
	*Petrohragia nanteulii												2						2			
Chenopodiaceae	*Polycarpon tetraphyllum	Four-leaf All-seed																				
	*Stellaria media	Chickweed																				
	Einadia hastata																	1				

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			15	16	17	56	57	58	83	84	85	86	87	88	89	90	91	117	162	164	175	176
Clusiaceae	E. nutans																		1			
	E. trigonos ssp. leiocarpa		1																			
	E. trigonos ssp. trigonos	Fishweed	4																			
	Chenopodium sp.																					
	Hypericum gramineum			3																		
	*H. perforatum	St. John's Wort			2				2	2		2	2									
Convolvulaceae	Dichondra repens	Kidney Weed	adj							1	1		2		adj				2	1		
Euphorbiaceae	Crassula sp.																			1		
	Chamaesyce drummondii									1			1									
Fabaceae	Daucus glochidiatus		1																			
	Poranthera microphylla									1	2				1							
	Desmodium ?brachypodum																					
	D. varians	Tick Trefoil	2						2				1		1	1			1	1		

Table B.1 RESULTS OF FLORA SURVEY FOR TOWERS 15-176 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common name	Tower number where quadrat was located																			
			15	16	17	56	57	58	83	84	85	86	87	88	89	90	91	117	162	164	175	176
	*Medicago polymorpha																					
	*Trifolium arvense				2																	
	*T. repens	White Clover	1																			
	*T. campestre																					
	*T. dubia	Yellow Suckling Clover																				
Gentianaceae	Centaurium spicatum			3	3																	
Geraniaceae	Geranium solanderi	a Geranium							1				2		adj							
Goodeniaceae	Goodenia hederacea				1	1	1		1		1			1		1		2	2		1	2
	G. macbarronii																2					
	Dampiera purpurea						4															
	Gonocarpus elatus									adj	3	2	3	3		3						
Lamiaceae	Ajuga australis	Australian Bugle														adj						

Table B.1 RESULTS OF FLORA SURVEY FOR TOWERS 15-176 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common name	Tower number where quadrat was located																			
			15	16	17	56	57	58	83	84	85	86	87	88	89	90	91	117	162	164	175	176
	*Marrubium vulgare	Horehound																				
Linaceae	*Linum trigynum	French Flax			2																	
Malvaceae	Sida cunninghamii		2																			
	S. ?corrugata																					
	*Malva sp.																					
Oxalidaceae	Oxalis chnoodes		1																			
	Oxalis radicata																					
	*O. incarnata																					
	O. sp.															1						
Plantaginaceae	Plantago debilis																					
	P. gaudichaudii				4																	
	P. hispida								2	3		2	2	1								
	*Acetosella vulgaris																2					
Polygonaceae	*Polygonum aviculare	Wireweed																				
	Rumex brownii																					
Portulacaceae	*Portulacca	Pigweed																				

Table B.1 RESULTS OF FLORA SURVEY FOR TOWERS 15-176 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common name	Tower number where quadrat was located																			
			15	16	17	56	57	58	83	84	85	86	87	88	89	90	91	117	162	164	175	176
	oleracea																					
Primulaceae	*Anagallis arvensis	Scarlet Pimpernel	1																			
	Acaena agnipila														adj							
Rosaceae	Acaena ovina				1																	
Rubiaceae	Asperula conferta	Common Bedstraw		2	3														1			
	Opercularia hispida																					
	Pomax umbellata					2	2	2				2		2		2						
Scrophulariaceae	*Verbascum virgatum																					
	Veronica calycina	Hairy Speedwell	2		adj																	
Solanaceae	Solanum cinereum		2								1				1	1				1		
	*S. nigrum										1											
Stackhousiaceae	Stackhousia monogyna				3																	
	S. viminea			2		2	2	1		1		2	1		1	1			1			

Table B.1 RESULTS OF FLORA SURVEY FOR TOWERS 15-176 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common name	Tower number where quadrat was located																			
			15	16	17	56	57	58	83	84	85	86	87	88	89	90	91	117	162	164	175	176
Urticaceae	Urtica incisa	Stinging Nettle																				
Herbs - Monocots																						
Anthericaceae	Arthropodium sp.										1											
	Dichopogon sp.	Choclate Lily		2	2																	
	Laxmannia gracilis			2							1	3										
	Tricoryne elatior	Yellow Autumn-lily			2						1								1			
Cyperaceae	Carex inomitata																		3			
	C. inversa																		1			
	C. sp.									1												
	Fimbristylis dichotoma								1	1		2	2			2						
	Gahnia aspera	Rough Saw-sedge			1																	
	Lepidosperma laterale					3		2					1						1	1		

Table B.1 RESULTS OF FLORA SURVEY FOR TOWERS 15-176 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common name	Tower number where quadrat was located																			
			15	16	17	56	57	58	83	84	85	86	87	88	89	90	91	117	162	164	175	176
	Schoenus sp.							1	adj													
	Patersonia glabrata	Purple Flag				1	3	2														
Juncaceae	Juncus filicaulis																4					
	J. usitatus				2																	
	J. sp.																	4				
Lomandraceae	Lomandra filiformis																					
	ssp. filiformis				2																	
	L. glauca					3	4	2						1				2			1	1
	L. multiflora	Many-flowered Mat-rush				2	1	2	1		1						1	2				
	L. confertifolia					1	4	2									2	2				
Orchidaceae	Thelymitra sp.	Sun Orchid	1																			
	unidentifiable sp.											1										
Phormiaceae	Dianella longifolia										1					1		1				
	D. revoluta	Paroo Lily				2	3				adj							adj				
	Stypandra glauca										5								1	2		
Poaceae	Agrostis sp.	Blown		4	2										1			adj				

Table B.1 RESULTS OF FLORA SURVEY FOR TOWERS 15-176 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common name	Tower number where quadrat was located																			
			15	16	17	56	57	58	83	84	85	86	87	88	89	90	91	117	162	164	175	176
		Grass																				
	*Avena fatua	Wild Oats																				
	Aristida jerichoensis var. spinulifera			3																		
	A. ramosa				2				3	2			1									
	A. vagans			2			2	2	3	4	2	4	4	4	4	4	4	3	4	4		
	A. sp.																					
	*Arundinella nepalensis	Reedgrass															4					
	Austrostipa scabra	a Speargrass	2		2						2	1	2	1	2	2			4	4		
	Bothriochloa decipiens	Red Leg Grass															2		1			
	B. erianthoides			2					adj	3								adj	1			
	*Briza minor	Shivery Grass		1	1																	
	Chloris ventricosa	Windmill Grass															2					
	Cymbopogon	Barb-wire							2	2	1	2							2			

Table B.1 RESULTS OF FLORA SURVEY FOR TOWERS 15-176 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common name	Tower number where quadrat was located																			
			15	16	17	56	57	58	83	84	85	86	87	88	89	90	91	117	162	164	175	176
	refracta	Grass																				
	Danthonia eriantha	a Wallaby Grass		4													4			1	1	
	D. linkii															2						
	D. monticola			.						1	2										2	
	D. racemosa var. racemosa		5							1	1			adj								
	D. setacea																					
	D. sp.									1		1	2	2	2							
	Dichanthium sericeum	Queensland Bluegrass								1	2											
	Dichelachne micrantha	Small-flowered Plume Grass			adj	2	adj	1	1		1	3			1		adj		1		1	
	Digitaria brownii	Cotton Panic Grass								3								1				
	D. sp.													1								
	Echinopogon caespitosus					1					2					4						

Table B.1 RESULTS OF FLORA SURVEY FOR TOWERS 15-176 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common name	Tower number where quadrat was located																			
			15	16	17	56	57	58	83	84	85	86	87	88	89	90	91	117	162	164	175	176
	<i>Elymus scaber</i>																					
	<i>Enneapogon gracilis</i>										2		2									
	* <i>Eragrostis cilienensis</i>																4					
	<i>E. leptostachya</i>	Paddock Love-grass										1										
	<i>E. sp.</i>									1												
	* <i>Hordeum leporinum</i>	Barley Grass																				
	* <i>Lolium sp.</i>	Rye Grass																				
	<i>Microlaena stipoides</i>	Weeping Meadow-grass									2						3					
	* <i>Nassella neesiana</i>	Chilean Needle Grass																				
	<i>Panicum effusum</i>											1	2	2		3	3		1			
	* <i>Paspalum dilatatum</i>																1					
	<i>Poa sp</i>					4			3													2
	* <i>Setaria gracilis</i>	Pigeon															2					

Table B.1 RESULTS OF FLORA SURVEY FOR TOWERS 15-176 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common name	Tower number where quadrat was located																				
			15	16	17	56	57	58	83	84	85	86	87	88	89	90	91	117	162	164	175	176	
		Grass																					
	Sporobolus creber	Rats Tail Grass							2														
	S. elongatus									2													
	Stipa mollis				2		1																
	Stipa verticillata	Small Bamboo Grass	2																				
	Themeda australis	Kangaroo Grass		6	7				5		2												
	*Vulpia sp																	1					

Table B.1 RESULTS OF FLORA SURVEY FOR TOWERS 15-176 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common name	Tower number where quadrat was located																			
			15	16	17	56	57	58	83	84	85	86	87	88	89	90	91	117	162	164	175	176
	Hardenbergia violacea										1											
Ranunculaceae	Clematis glycinoides	Traveller's Joy	adj																			
Rosaceae	*Rubus fruticosus																1					
Mistletoes																						
	Amyema miquelii					2											2		2			
Loranthaceae	Amyema pendulum		2		1													1				
Viscaceae	Notothixos cornifolius	Kurrajong Mistletoe									adj	adj										

Cover Abundance

1 = rare in quadrat

2 = occasional in quadrat, less than 5%

3 = common in quadrat, less than 5%

4 = very common in quadrat but less than 5%

5 = 5-25% cover

Table B.1 RESULTS OF FLORA SURVEY FOR TOWERS 15-176 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common name	Tower number where quadrat was located																			
			15	16	17	56	57	58	83	84	85	86	87	88	89	90	91	117	162	164	175	176

6 = 26-50% cover

* = introduced species

adj = recorded adjacent to quadrat

Table B.2 RESULTS OF FLORA SURVEY FOR TOWERS 193-267 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common Name	Tower number where quadrat was located																	
			193	194	195	197	198	204	205	206	207	208	209	211	224	225	226	227	228	267
Trees																				
Cupressaceae	Callitris endlicheri	Black Cypruss Pine			4					1					2	1				
Casuarinaceae	Allocasuarina gymnanthera																			
	Allocasuarina luemannii	Bull Oak	6											1						
	Acacia verticillata	Drooping she-oak																		
Fabaceae	Acacia implexa	Hickory Wattle										1								
Myrtaceae	Angophora floribunda	Rough-barked Apple					2				5					1				
	Eucalyptus agglomerata	Blue Top Stringy Bark																		
	Eucalyptus albens	White Box			1	1						1	5		1	1		1		adj

Table B.2 RESULTS OF FLORA SURVEY FOR TOWERS 193-267 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common Name	Tower number where quadrat was located																	
			193	194	195	197	198	204	205	206	207	208	209	211	224	225	226	227	228	267
	<i>E. blakelyi</i>	Blakely's Red Gum																		
	<i>E. bridgesiana</i>																			
	<i>E. crebra</i>	Narrow-leaved Ironbark																		
	<i>E. dealbata</i>	Tumble-down Red Gum		adj	4			2	2	1	adj			1					adj	
	<i>E. dwyeri</i>	Dwyers Red Gum																		
	<i>E. fibrosa</i>	Broad-leaved Ironbark																		
	<i>E. ?goniocalyx</i>	Long-leaved Box																	adj	
	<i>E. macrorhyncha</i>	Red Stringybark		adj												2			1	
	<i>E. melliodora</i>	Yellow Box				1	2											1		
	<i>E. microcarpa</i>	Inland Grey Box	5																	
	<i>E. polyanthemos</i>	Red Box																		

Table B.2 RESULTS OF FLORA SURVEY FOR TOWERS 193-267 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common Name	Tower number where quadrat was located																	
			193	194	195	197	198	204	205	206	207	208	209	211	224	225	226	227	228	267
	E. punctata	Grey Gum																		
	E. rossii	Inland Scribbly Gum																		
	E. sparsifolia	Narrow-leaved Stringybark																		
Sterculiaceae	Brachychiton populnea	Kurrajong									5	2						1		
Shrubs																				
Asteraceae	Cassinia arcuata	Sifton Bush			1	1														
	C. sp.																			
	Olearia microphylla																			
Dilleniaceae	Hibbertia obtusifolia			adj	1	2	5	4	4	2	2		1	2						
	H. serpyllifolia																			
Epacridaceae	Astroloma humifusum	Cranberry Heath																		
	Brachyloma																			

Table B.2 RESULTS OF FLORA SURVEY FOR TOWERS 193-267 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common Name	Tower number where quadrat was located																	
			193	194	195	197	198	204	205	206	207	208	209	211	224	225	226	227	228	267
	daphnoides																			
	Leucopogon microphyllus																			
	Leucopogon muticus																			
	Lissanthe strigosa	Peach Heath		1				1	2	3										
	Melichrus urceolatus								1	2				2						
	Styphelia triflora																			
Euphorbiaceae	Phyllanthus hirtellus																			
Fabaceae	Daviesia genistifolia																			
	D. ulicifolia	Gorse Bitter Pea																		
	Dillwynia juniperina	Prickly Parrot Pea						adj	4	4										
	D. parvifolia																			
	Gompholobium huegelii																			

Table B.2 RESULTS OF FLORA SURVEY FOR TOWERS 193-267 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common Name	Tower number where quadrat was located																	
			193	194	195	197	198	204	205	206	207	208	209	211	224	225	226	227	228	267
	Indigofera																			
	adesmiifolia																			
	Swainsona					1							3							
	galegifolia																			
	Acacia vestita																			
	A. brownii																			
	A. decora									adj										
	A. flexifolia																			
	A. gladiiformis																			
	A. lanigera																			
	A. montana																			
	A. penninervis																			
	var. penninervis																			
	A. ulicifolia																			
	A. uncinata																			
	A. verniflua	Varnish																		
		Wattle																		
	Leptospermum	Small-																		
	parvifolium	leaved Tea																		
		Tree																		

Table B.2 RESULTS OF FLORA SURVEY FOR TOWERS 193-267 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common Name	Tower number where quadrat was located																	
			193	194	195	197	198	204	205	206	207	208	209	211	224	225	226	227	228	267
Myrtaceae	Melaleuca thymifolia	Thyme Honey-myrtle																		
	Bursaria spinosa																			
	Grevillea ?sericea																			
	G. triternata																			
	Hakea dactyloides																			
Proteaceae	Persoonia linearis	Narrow-leaved Geebung																		
Rosaceae	*Rosa rubiginosa	Briar Rose									1									
	Leptomeria sp.																			
	Dodonaea boroniifolia																			
Sapindaceae	D. viscosa ssp. cuneata																			
	D. viscosa ssp. spatulata																			
Sterculiaceae	Cryptandra amara																			

Table B.2 RESULTS OF FLORA SURVEY FOR TOWERS 193-267 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common Name	Tower number where quadrat was located																	
			193	194	195	197	198	204	205	206	207	208	209	211	224	225	226	227	228	267
Thymeliaceae	Pimelea curviflora var. sericea																			
Xanthorrhoeaceae	Xanthorrhoea glauca ssp. angustifolia	a Grass Tree								3										
Herbs - Ferns																				
Sinopteridaceae	Cheilanthes distans	Rock Fern			2				1		1	1		1						
	C. sieberi	Mulga Fern	2	2			2		4	2	4	3	2	4		1	1	1	2	
Herbs - Dicots																				
Amaranthaceae	*Alternanthera sp. A					1												1		
Apiaceae	Hydrocotyle laxiflora						1			1			1			2		1	1	
	Brachycome multifida																			
	Bracteantha viscosa	a Paper Daisy																		

Table B.2 RESULTS OF FLORA SURVEY FOR TOWERS 193-267 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common Name	Tower number where quadrat was located																	
			193	194	195	197	198	204	205	206	207	208	209	211	224	225	226	227	228	267
Asteraceae	Calotus cuneata	Blue Burr-daisy																		
	C. lappulacea	Yellow Burr-daisy																		
	*Carduus pycnocephalus	Slender Thistle								2	1	1								
	*Carthamus lanatus	Saffron Thistle			1	3	2		2	2		3	4		4	1				4
	*Chondrilla juncea	Skeleton Weed										1				1	1	1		
	Chrysocephalum apiculatum	Yellow Buttons																		
	C. semipapposum																			
	*Cirsium vulgare																			
	*Conyza sp.	a Fleabane																		
	Cymbonotus lawsonianus																			
	*Facelis retusa																			
	Bracteantha viscosa	Sticky Everlasting																		

Table B.2 RESULTS OF FLORA SURVEY FOR TOWERS 193-267 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common Name	Tower number where quadrat was located																	
			193	194	195	197	198	204	205	206	207	208	209	211	224	225	226	227	228	267
	*Galinsoga parviflora																			
	Glossogyne tannensis				2		2					1	2	2						
	*Hypochaeris radicata	Flatweed	1							3	2					1			1	
	*Lactuca seriola											2				1				
	Podolepis neglecta																			
	Senecio ?hispidulus																			
	*Senecio madagascariensis																			
	?Sigesbeckia orientalis												4							
	Solenogyne belliioides					3						1	2					1		
	*Sonchus oleraceus	Sow Thistle								1		2	2			2		1		
	Vittadinia pterochaeta				4	1	2					1	3							

Table B.2 RESULTS OF FLORA SURVEY FOR TOWERS 193-267 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common Name	Tower number where quadrat was located																	
			193	194	195	197	198	204	205	206	207	208	209	211	224	225	226	227	228	267
Boraginaceae	V. muelleri												2							
	Cynoglossum australe												1							
	*Echium plantagineum	Patterson's Curse										2			4	4	4	4	3	
	*Lepidium africanum																			
Brassicaceae	*Sisymbrium officinale	Hedge Mustard										1								
Cactaceae	*Opuntia stricta	Prickly Pear											1							
Campanulaceae	Wahlenbergia gracilis	Small Bluebell											3							
	W. communis					1														
	W. stricta ssp. alterna																			
	W. stricta				2		2													
	W. sp.																			
Caryophyllaceae	*Cerastium glomeratum	Mouse-eared Chickweed									2									

Table B.2 RESULTS OF FLORA SURVEY FOR TOWERS 193-267 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common Name	Tower number where quadrat was located																	
			193	194	195	197	198	204	205	206	207	208	209	211	224	225	226	227	228	267
	*Petrorhagia nanteulii				2	2			1	2	3	4	4	4	2					
	*Polycarpon tetraphyllum	Four-leaf All-seed	1								1									2
	*Stellaria media	Chickweed														2			1	
Chenopodiaceae	Einadia hastata																			
	E. nutans																			
	E. trigonos ssp. leiocarpa														1	2		1	1	
	E. trigonos ssp. trigonos	Fishweed																		
	Chenopodium sp.									1						1				
Clusiaceae	Hypericum gramineum				1		2													
	*H. perforatum	St. John's Wort																		
Convolvulaceae	Dichondra repens	Kidney Weed			3	2	2	2	2	3	4	3	3	2				2		
	Crassula sp.																			
Euphorbiaceae	Chamaesyce drummondii					1		1		1		1		1						1

Table B.2 RESULTS OF FLORA SURVEY FOR TOWERS 193-267 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common Name	Tower number where quadrat was located																	
			193	194	195	197	198	204	205	206	207	208	209	211	224	225	226	227	228	267
Fabaceae	Daucus glochidiatus						3		2				3	4						
	Poranthera microphylla								2											
	Desmodium ?brachypodum									1	1									
	D. varians	Tick Trefoil			2	3	3	1	1	2	2	3	2	2			2	2	2	
	*Medicago polymorpha																	1		
	*Trifolium arvense					3		2	2	3	3	4	2	2	2		3	3	3	4
	*T. repens	White Clover																		2
	*T. campestre								2	3										
	*T. dubia	Yellow Suckling Clover								2	2	1								
Gentianaceae	Centaurium spicatum				2					1				1						
Geraniaceae	Geranium solanderi	a Geranium									3					2		2	2	

Table B.2 RESULTS OF FLORA SURVEY FOR TOWERS 193-267 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common Name	Tower number where quadrat was located																	
			193	194	195	197	198	204	205	206	207	208	209	211	224	225	226	227	228	267
Goodeniaceae	Goodenia				3		4	2	2	1				4						
	hederacea																			
	G. macbarronii																			
	Dampiera																			
	purpurea																			
Lamiaceae	Gonocarpus																			
	elatus																			
	Ajuga australis	Australian Bugle																		
Lamiaceae	*Marrubium	Horehound										1								
	vulgare																			
Linaceae	*Linum trigynum	French Flax			2								3	3						
Malvaceae	Sida												2							
	cunninghamii																			
	S. ?corrugata					3														
	*Malva sp.																			1
Oxalidaceae	Oxalis chnoodes																	2		
	Oxalis radiciosa				1					1		1				1		2		2
	*O. incarnata															1				
	O. sp.																			
Plantaginaceae	Plantago debilis												3							

Table B.2 RESULTS OF FLORA SURVEY FOR TOWERS 193-267 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common Name	Tower number where quadrat was located																	
			193	194	195	197	198	204	205	206	207	208	209	211	224	225	226	227	228	267
	<i>P. gaudichaudii</i>																			
	<i>P. hispida</i>																			
	* <i>Acetosella vulgaris</i>																			
Polygonaceae	* <i>Polygonum aviculare</i>	Wireweed									1									
	<i>Rumex brownii</i>										2	2			1	1	2	2	2	1
Portulacaceae	* <i>Portulacca oleracea</i>	Pigweed																2		
Primulaceae	* <i>Anagallis arvensis</i>	Scarlet Pimpernel											2							
	<i>Acaena agnipila</i>																			
Rosaceae	<i>Acaena ovina</i>																			
Rubiaceae	<i>Asperula conferta</i>	Common Bedstraw																		
	<i>Opercularia hispida</i>				2									4						
	<i>Pomax umbellata</i>																			
Scrophulariaceae	* <i>Verbascum virgatum</i>																			
	<i>Veronica calycina</i>	Hairy																		

Table B.2 RESULTS OF FLORA SURVEY FOR TOWERS 193-267 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common Name	Tower number where quadrat was located																	
			193	194	195	197	198	204	205	206	207	208	209	211	224	225	226	227	228	267
		Speedwell																		
Solanaceae	Solanum cinereum											2	2		1	1		1	1	
	*S. nigrum																			
Stackhousiaceae	Stackhousia monogyna																			
	S. viminea				1				1											
Urticaceae	Urtica incisa	Stinging Nettle														3		2		
Herbs - Monocots																				
Anthericaceae	Arthropodium sp.					1														
	Dichopogon sp.	Chocolate Lily										1	1							
	Laxmannia gracilis																			
	Tricoryne elatior	Yellow Autumn-lily										1								
Cyperaceae	Carex inomitata																			
	C. inversa					1														

Table B.2 RESULTS OF FLORA SURVEY FOR TOWERS 193-267 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common Name	Tower number where quadrat was located																	
			193	194	195	197	198	204	205	206	207	208	209	211	224	225	226	227	228	267
Juncaceae	C. sp.																			
	Fimbristylis dichotoma																			
	Gahnia aspera	Rough Saw-sedge																		
	Lepidosperma laterale																			
	Schoenus sp.																			
	Patersonia glabrata	Purple Flag																		
Lomandraceae	Juncus filicaulis																			
	J. usitatus					2														
	J. sp.							2						2						
	Lomandra filiformis																			
	ssp. filiformis											2						1		
	L. glauca																			
	L. multiflora	Many-flowered Mat-rush																		
	L. confertifolia																			

Table B.2 RESULTS OF FLORA SURVEY FOR TOWERS 193-267 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common Name	Tower number where quadrat was located																	
			193	194	195	197	198	204	205	206	207	208	209	211	224	225	226	227	228	267
Orchidaceae	Thelymitra sp.	Sun Orchid																		
	unidentifiable sp.																			
Phormiaceae	Dianella longifolia											1								
	D. revoluta	Paroo Lily							1											
	Stypandra glauca				2									1						
Poaceae	Agrostis sp.	Blown Grass		4				4	4	4		2		2		1			2	
	*Avena fatua	Wild Oats										1			4	2	3	4	4	
	Aristida jerichoensis var. spinulifera				4			2	3	3		2		3					1	
	A. ramosa					4	5	1	2	3	4		2						1	
	A. vagans				3	3	3			2	2									
	A. sp.			3								2								
	*Arundinella nepalensis	Reedgrass																		
	Austrostipa scabra	a Speargrass	1	4		4	3	1	3	3	2	4	4	4	3				2	2
	Bothriochloa decipiens	Red Leg Grass			4		1													

Table B.2 RESULTS OF FLORA SURVEY FOR TOWERS 193-267 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common Name	Tower number where quadrat was located																	
			193	194	195	197	198	204	205	206	207	208	209	211	224	225	226	227	228	267
	B. erianthoides																			
	*Briza minor	Shivery Grass						2	1	1										
	Chloris ventricosa	Windmill Grass																		
	Cymbopogon refracta	Barb-wire Grass								1			1	1						
	Danthonia eriantha	a Wallaby Grass	2	2		3	2	4	4			2		4						
	D. linkii												2							
	D. monticola				3					2										
	D. racemosa var. racemosa									2	4	3								
	D. setacea					1														
	D. sp.																			
	Dichanthium sericeum	Queensland Bluegrass																		
	Dichelachne micrantha	Small-flowered Plume Grass			2	2		2	2	2	2		2	2						

Table B.2 RESULTS OF FLORA SURVEY FOR TOWERS 193-267 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common Name	Tower number where quadrat was located																	
			193	194	195	197	198	204	205	206	207	208	209	211	224	225	226	227	228	267
	Digitaria brownii	Cotton Panic Grass												1						
	D. sp.																			
	Echinopogon caespitosus																			
	Elymus scaber								3	3	2	3	3	2					1	
	Enneapogon gracilis																			
	*Eragrostis cilienensis																			
	E. leptostachya	Paddock Love-grass																		
	E. sp.																			
	*Hordeum leporinum	Barley Grass																2		1
	*Lolium sp.	Rye Grass	1									2			4			2		
	Microlaena stipoides	Weeping Meadow- grass										2	2		4	5	3	4	4	
	*Nassella neesiana	Chilean Needle													3	5	4	6	3	

Table B.2 RESULTS OF FLORA SURVEY FOR TOWERS 193-267 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common Name	Tower number where quadrat was located																	
			193	194	195	197	198	204	205	206	207	208	209	211	224	225	226	227	228	267
		Grass																		
	Panicum effusum																			
	*Paspalum dilatatum																			
	Poa sp										2									
	*Setaria gracilis	Pigeon Grass																		
	Sporobolus creber	Rats Tail Grass																		
	S. elongatus																			
	Stipa mollis													2						
	Stipa verticillata	Small Bamboo Grass																		
	Themeda australis	Kangaroo Grass								adj	1	1								
	*Vulpia sp		4	1	2			3	3	3	3	2					3	3	5	
Vines																				
Convolvulaceae	Convolvulus erubescens	Blushing Bindweed					1				1		2							

Table B.2 RESULTS OF FLORA SURVEY FOR TOWERS 193-267 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common Name	Tower number where quadrat was located																	
			193	194	195	197	198	204	205	206	207	208	209	211	224	225	226	227	228	267
Fabaceae	Glycine canescens																			
	Glycine clandestina								1			2		2						
	G. tabacina				1				1				2							
	G. sp.									2										
	Hardenbergia violacea																			
Ranunculaceae	Clematis glycinoides	Traveller's Joy																		
Rosaceae	*Rubus fruticosus																			
Mistletoes																				
Loranthaceae	Amyema miquelii																			
	Amyema pendulum					1		1	2	2										
Viscaceae	Notothixos cornifolius	Kurrajong Mistletoe																	1	

Cover Abundance

1 = rare in quadrat

Table B.2 RESULTS OF FLORA SURVEY FOR TOWERS 193-267 (KEY AT BOTTOM OF TABLE)

Family	Scientific Name	Common Name	Tower number where quadrat was located																	
			193	194	195	197	198	204	205	206	207	208	209	211	224	225	226	227	228	267
2 = occasional in quadrat, less than 5%																				
3 = common in quadrat, less than 5%																				
4 = very common in quadrat but less than 5%																				
5 = 5-25% cover																				
6 = 26-50% cover																				
* = introduced species																				
adj = recorded adjacent to quadrat																				

Appendix C

Results of Fauna Surveys

Table C.1 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 15-89 (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T15	T16	T17	T56	T57	T58	T83	T84	T85	T86	T87	T88	T89
Terrestrial Mammals																
Eastern Grey Kangaroo	<i>Macropus giganteus</i>			1		3				1						
Red Necked Wallaby	<i>Macropus rufogriseus</i>					1										
Wallaroo	<i>Macropus robustus</i>															
Red Kangaroo	<i>Macropus rufus</i>															
Swamp Wallaby	<i>Wallabia bicolor</i>					1										
Short-beaked Echidna	<i>Tachyglossus aculeatus</i>					1										
Wombat	<i>Vombatus ursinus</i>				scat/1										1	
Emu	<i>Dromaius novaehollandiae</i>															1
Brown Antechinus	<i>Antechinus stuartii</i>															
Mouse	<i>Mus domesticus</i>															
Stripe-faced Dunnart	<i>Sminthopsis macroura</i>		V													
Common Dunnart	<i>Sminthopsis murina</i>															
	<i>Sminthopsis</i> sp.															
	<i>Dasyuridae</i>									H						
Cat	<i>Felis catus</i>			2H											H	
Fox	<i>Vulpes vulpes</i>														H	
Rabbit	<i>Oryctolagus cuniculus</i>				scat	2										
Cow					scat	5										

Table C.1 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 15-89 (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T15	T16	T17	T56	T57	T58	T83	T84	T85	T86	T87	T88	T89
Arboreal Mammals																
Sugar Glider	<i>Petaurus breviceps</i>															
Brush-tail Possum	<i>Trichosurus vulpecula</i>			4, 6H						1, 3H					1	H
Ring-tail Possum	<i>Pseudocheirus peregrinus</i>															
	<i>Petuaridae or Phalangeridae</i>									H			2			
	<i>Trichosurus vulpecula</i> or <i>Pseudocheirus peregrinus</i>			H											H	H
Microchiropteran Bats																
Eastern Freetail Bat	<i>Mormopterus species</i>															
Eastern Horseshoe Bat	<i>Rhinolophus megaphyllus</i>			A												A
Large-eared Pied Bat	<i>Chalinolobus dwyeri</i>	V	V	A												C
Gould's Wattled Bat	<i>Chalinolobus gouldii</i>			B												A
Common Bentwing Bat	<i>Miniopterus schreibersii</i>		V	C						C						B
Unknown (eastern)	<i>Nyctophilus</i> sp. (<i>N. geoffroyi</i> ,		V	A						A						A
Long-eared Bat	<i>N. gouldi</i> or vulnerable <i>N.</i> <i>timoriensis</i>)															

Table C.1 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 15-89 (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T15	T16	T17	T56	T57	T58	T83	T84	T85	T86	T87	T88	T89
Eastern Cave Bat	<i>Vespadelus darlingtoni</i>															
Southern Forest Bat	<i>Vespadelus regulus</i>			A						A						
Unknown Forest Bat	<i>Vespadelus regulus</i> or <i>V. vulturinus</i>															A
Unknown Forest or Cave Bat	<i>Vespadelus</i> sp. (<i>V. pumilus</i> , <i>V. trougtoni</i> , <i>V. vulturinus</i> or <i>Chalinolobus morio</i>)			B						B						
White-striped Freetail Bat	<i>Tadarida australis</i>															A
Yellow-bellied Sheath-tail Bat	<i>Saccolaimus flaviventris</i>															
Birds																
Brown Quail	<i>Coturnix ypsilophora</i>											A				
Crested Pigeon	<i>Ocyphaps lophotes</i>															
Peaceful Dove	<i>Geopelia striata</i>															
Nankeen Kestrel	<i>Falco cenchroides</i>															
Noisy Minor	<i>Manorina melanocephala</i>															
Common Bronzewing	<i>Phaps chalcoptera</i>				A										A	

Table C.1 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 15-89 (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T15	T16	T17	T56	T57	T58	T83	T84	T85	T86	T87	T88	T89
Wedge-tailed Eagle	<i>Aquila audax</i>			A												
Brown Treecreeper	<i>Climacteris picumnus</i>		V	A												
White-throated Treecreeper	<i>Cormobates leucophaeus</i>			A	A	A	A	A	A			1	1			A
Speckled Warbler	<i>Chthonicola sagittata</i>		V								4	7				
Glossy Black Cockatoo	<i>Calyptorhynchus lathami</i>	E	V				2					1				
Galah	<i>Cacatua roseicapilla</i>															
Sulphur-crested Cockatoo	<i>Cacatua galerita</i>															
Musk Lorikeet	<i>Glossopsitta concinna</i>															
Little Lorikeet	<i>Glossopsitta pusilla</i>					A										
Eastern Rosella	<i>Platycercus eximius</i>			A						A						
Red-rumped Parrot	<i>Psephotus haematonotus</i>					A										
Pallid Cuckoo	<i>Cuculus pallidus</i>					A										
Laughing Kookaburra	<i>Dacelo novaeguineae</i>			A	A	A										
Sacred Kingfisher	<i>Todiramphus sanctus</i>					A										
Rainbow Bee-eater	<i>Merops ornatus</i>	O														
Dollarbird	<i>Eurystomus orientalis</i>	O														
Superb Fairy-wren	<i>Malurus cyaneus</i>															

Table C.1 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 15-89 (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T15	T16	T17	T56	T57	T58	T83	T84	T85	T86	T87	T88	T89
Spotted Pardalote	<i>Pardalotus punctatus</i>			A		A	A	A	A	A	A		A		A	A
Striated Pardalote	<i>Pardalotus striatus</i>															
Rockwarbler	<i>Origma solitaria</i>						A									
Weebill	<i>Smicrornis brevirostris</i>			A	B	B		A			A				A	
White-throated Gerygone	<i>Gerygone olivacea</i>			A	A	A										
Brown Thornbill	<i>Acanthiza pusilla</i>			A			A				A			A		
Buff-rumped Thornbill	<i>Acanthiza reguloides</i>				B		B					A			A	
Yellow-rumped Thornbill	<i>Acanthiza chrysorrhoa</i>										B	B				
Yellow Thornbill	<i>Acanthiza nana</i>				A					B	B	B	B	B		
Striated Thornbill	<i>Acanthiza lineata</i>									B		B		B		
Southern Whiteface	<i>Aphelocephala leucopsis</i>											A				
Red Wattlebird	<i>Anthochaera carunculata</i>								A	A	A		A			
Spiny-cheeked Honeyeater	<i>Acanthagenys rufogularis</i>															
Striped Honeyeater	<i>Plectorhyncha lanceolata</i>									A						
Noisy Friarbird	<i>Philemon corniculatus</i>			A	A	B							A			
Little Friarbird	<i>Philemon citreogularis</i>															
Yellow-faced Honeyeater	<i>Lichenostomus chrysops</i>				A		A	A	A	A	B	B	A			A

Table C.1 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 15-89 (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T15	T16	T17	T56	T57	T58	T83	T84	T85	T86	T87	T88	T89
White-eared Honeyeater	<i>Lichenostomus leucotis</i>			A			A	A	A		A			A	A	A
Fuscous Honeyeater	<i>Lichenostomus fuscus</i>					A										
White-plumed Honeyeater	<i>Lichenostomus penicillatus</i>			A	A	B										
Brown-headed Honeyeater	<i>Melithreptus brevirostris</i>					A					B					
White-naped Honeyeater	<i>Melithreptus lunatus</i>											A				A
Eastern Spinebill	<i>Acanthorhynchus tenuirostris</i>						A									
Jacky Winter	<i>Microeca fascinans</i>			A							A					
Red-capped Robin	<i>Petroica goodenovii</i>											A				
Eastern Yellow Robin	<i>Eopsaltria australis</i>			A	A	A										
White-browed Babbler	<i>Pomatostomus superciliosus</i>			A											B	
Varied Sittella	<i>Daphoenositta chrysoptera</i>											A			B	
Crested Shrike-tit	<i>Falcunculus frontatus</i>															
Golden Whistler	<i>Pachycephala pectoralis</i>											A				A
Rufous Whistler	<i>Pachycephala rufiventris</i>			A	A	A					A					
Grey Shrike-thrush	<i>Colluricincla harmonica</i>			A				A			A	A		A		

Table C.1 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 15-89 (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T15	T16	T17	T56	T57	T58	T83	T84	T85	T86	T87	T88	T89
Restless Flycatcher	<i>Myiagra inquieta</i>															
Magpie-lark	<i>Grallina cyanoleuca</i>															
Grey Fantail	<i>Rhipidura fuliginosa</i>			A	A	A					A	A		A		
Willie Wagtail	<i>Rhipidura leucophrys</i>			A		A										
Black-faced Cuckoo-shrike	<i>Coracina novaehollandiae</i>			A						A	A					A
White-bellied Cuckoo-shrike	<i>Coracina papuensis</i>										A					
Cicadabird	<i>Coracina tenuirostris</i>				A											
White-winged Triller	<i>Lalage sueurii</i>					A										
Olive-backed Oriole	<i>Oriolus sagittatus</i>															
White-browed Woodswallow	<i>Artamus superciliosus</i>			B	B	C										
Dusky Woodswallow	<i>Artamus cyanopterus</i>			A				A	A				A			
Grey Butcherbird	<i>Cracticus torquatus</i>			A												
Pied Butcherbird	<i>Cracticus nigrogularis</i>															
Australian Magpie	<i>Gymnorhina tibicen</i>					A										
Pied Currawong	<i>Strepera graculina</i>						A									
Australian Raven	<i>Corvus coronoides</i>			A						A			A			

Table C.1 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 15-89 (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T15	T16	T17	T56	T57	T58	T83	T84	T85	T86	T87	T88	T89
White-winged Chough	<i>Corcorax melanorhamphos</i>										B					
Apostlebird	<i>Struthidea cinerea</i>															
Red-browed Finch	<i>Neochmia temporalis</i>											B				
Diamond Firetail	<i>Stagonopleura guttata</i>		V	A												
Mistletoebird	<i>Dicaeum hirundinaceum</i>				A					A		A			A	A
Welcome Swallow	<i>Hirundo neoxena</i>															
Fairy Martin	<i>Hirundo ariel</i>															
Rufous Songlark	<i>Cincloramphus mathewsi</i>															
Silvereye	<i>Zosterops lateralis</i>			A	A							A				
Barn Owl	<i>Tyto alba</i>															
Australian Owlet Nightjar	<i>Aegotheles cristatus</i>															
Tawny Frogmouth	<i>Podargus strigoides</i>															
Southern Boobook	<i>Ninox novaeseelandiae</i>															
Reptiles																
Cunningham's Spiny-tailed Skink	<i>Egernia cunninghami</i>															
Snake-necked Turtle	<i>Chelodina longicollis</i>															2

Table C.1 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 15-89 (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T15	T16	T17	T56	T57	T58	T83	T84	T85	T86	T87	T88	T89
Robust Velvet Gecko	<i>Oedura robusta</i>															
Eastern Stone Gecko	<i>Diplodactylus vittatus</i>															
Two-clawed Worm-skink	<i>Anomalopus leuckartii</i>			1												
South-eastern Morethia Skink	<i>Morethia boulengeri</i>															
Coppertailed Skink	<i>Ctenotus taeniolatus</i>															
Thick-tailed Gecko	<i>Underwoodisaurus milii</i>															
White's Rock-skink	<i>Egernia whitii</i>															
Robust Ctenotus	<i>Ctenotus robustus</i>															
Tree Crevice-skink	<i>Egernia striolata</i>															
Lesueur's Velvet Gecko	<i>Oedura lesueurii</i>															
Variegated Dtella	<i>Gehyra variegata</i>															
Red-naped Snake	<i>Furina diadema</i>															
Bibron's Toadlet	<i>Pseudophryne bibroni</i>															
Invertebrates																
Scorpion																
European Bee	<i>Apis mellifera</i>															

Table C.1 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 15-89 (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T15	T16	T17	T56	T57	T58	T83	T84	T85	T86	T87	T88	T89
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Key

EPBC Status: E=Endangered, V=Vulnerable, O=Listed marine overfly area

TSC Status: E=Endangered, V=Vulnerable

The number of animals observed is recorded with the following exceptions:

Hair tube results are expressed as a multiple of H

Microchiropteran bats are recorded as A (definite ID), B (probable ID) or C (possible ID)

Birds are recorded as A (abundance of 1-5), B (abundance of 6-20), C (abundance of 21-50) or Br (Exhibiting breeding behaviours)

Table C.2 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 90-204 (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T90	T91	T113	T162	T164	T175	T176	T193	T194	T195	T196	T197	T198	T204
Terrestrial Mammals																	
Eastern Grey Kangaroo	<i>Macropus giganteus</i>																
Red Necked Wallaby	<i>Macropus rufogriseus</i>								2								
Walleroo	<i>Macropus robustus</i>					1			5					9			
Red Kangaroo	<i>Macropus rufus</i>									H							
Swamp Wallaby	<i>Wallabia bicolor</i>																
Short-beaked Echidna	<i>Tachyglossus aculeatus</i>													2			
Wombat	<i>Vombatus ursinus</i>																
Emu	<i>Dromaius novaehollandiae</i>																
Brown Antechinus	<i>Antechinus stuartii</i>															1	
Mouse	<i>Mus domesticus</i>															1	
Stripe-faced	<i>Sminthopsis</i>		V														

Table C.2 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 90-204 (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T90	T91	T113	T162	T164	T175	T176	T193	T194	T195	T196	T197	T198	T204
Dunnart	<i>macroura</i>																
Common Dunnart	<i>Sminthopsis murina</i>													1			
	<i>Sminthopsis</i> sp.															H	
	<i>Dasyuridae</i>																
Cat	<i>Felis catus</i>																
Fox	<i>Vulpes vulpes</i>					dead										H	
Rabbit	<i>Oryctolagus cuniculus</i>											warren					
Cow																	
Arboreal Mammals																	
Sugar Glider	<i>Petaurus breviceps</i>																
Brush-tail Possum	<i>Trichosurus vulpecula</i>					4		1	3	1, H				1			
Ring-tail Possum	<i>Pseudocheirus peregrinus</i>					3											

Table C.2 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 90-204 (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T90	T91	T113	T162	T164	T175	T176	T193	T194	T195	T196	T197	T198	T204
	<i>Petuaridae</i> or <i>Phalangeridae</i> <i>Trichosurus</i> <i>vulpecula</i> or <i>Pseudocheirus</i> <i>peregrinus</i>									H						1	
Microchiropteran																	
Bats																	
Eastern Freetail Bat	<i>Mormopterus</i> species						A										
Eastern Horseshoe Bat	<i>Rhinolophus</i> <i>megaphyllus</i>																
Large-eared Pied Bat	<i>Chalinolobus</i> <i>dwyeri</i>	V	V														
Gould's Wattled Bat	<i>Chalinolobus</i> <i>gouldii</i>					A	B										
Common Bentwing Bat	<i>Miniopterus</i> <i>schreibersii</i>		V				A			B					B		

Table C.2 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 90-204 (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T90	T91	T113	T162	T164	T175	T176	T193	T194	T195	T196	T197	T198	T204
Unknown (eastern) Long- eared Bat	<i>Nyctophilus</i> sp. (<i>N. geoffroyi</i> , <i>N.</i> <i>gouldi</i> or <i>vulnerable N.</i> <i>timoriensis</i>)		V						B						B		
Eastern Cave Bat	<i>Vespadelus</i> <i>darlingtoni</i>						A										
Southern Forest Bat	<i>Vespadelus</i> <i>regulus</i>					B	A		A	C					A		
Unknown Forest Bat	<i>Vespadelus</i> <i>regulus</i> or <i>V.</i> <i>vulturnus</i>																
Unknown Forest or Cave Bat	<i>Vespadelus</i> sp. (<i>V. pumilus</i> , <i>V.</i> <i>troughtoni</i> , <i>V.</i> <i>vulturnus</i> or <i>Chalinolobus</i> <i>morio</i>)						C		C								
White-striped Freetail Bat	<i>Tadarida australis</i>																

Table C.2 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 90-204 (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T90	T91	T113	T162	T164	T175	T176	T193	T194	T195	T196	T197	T198	T204
Yellow-bellied Sheath-tail Bat	<i>Saccolaimus flaviventris</i>																
Birds																	
Brown Quail	<i>Coturnix ypsilophora</i>																
Crested Pigeon	<i>Ocyphaps lophotes</i>						B		A								A
Peaceful Dove	<i>Geopelia striata</i>															A	
Nankeen Kestrel	<i>Falco cenchroides</i>													A			
Noisy Minor	<i>Manorina melanocephala</i>					B	B				A						
Common Bronzewing	<i>Phaps chalcoptera</i>					A	B	B	1	2							A
Wedge-tailed Eagle	<i>Aquila audax</i>									A							
Brown Treecreeper	<i>Climacteris picumnus</i>		V					4								A	
White-throated Treecreeper	<i>Cormobates leucophaeus</i>			A				A									A

Table C.2 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 90-204 (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T90	T91	T113	T162	T164	T175	T176	T193	T194	T195	T196	T197	T198	T204
Speckled Warbler	<i>Chthonicola sagittata</i>		V					3				A	A				
Glossy Black Cockatoo	<i>Calyptorhynchus lathamii</i>	E	V														
Galah	<i>Cacatua roseicapilla</i>					A					A				A	A	
Sulphur-crested Cockatoo	<i>Cacatua galerita</i>					A									A	A	
Musk Lorikeet	<i>Glossopsitta concinna</i>																
Little Lorikeet	<i>Glossopsitta pusilla</i>																
Eastern Rosella	<i>Platycercus eximius</i>					A	A										
Red-rumped Parrot	<i>Psephotus haematonotus</i>					A	B									A	
Pallid Cuckoo	<i>Cuculus pallidus</i>																
Laughing Kookaburra	<i>Dacelo novaeguineae</i>														A	A	
Sacred Kingfisher	<i>Todiramphus</i>									A						A	A

Table C.2 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 90-204 (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T90	T91	T113	T162	T164	T175	T176	T193	T194	T195	T196	T197	T198	T204
	<i>sanctus</i>																
Rainbow Bee-eater	<i>Merops ornatus</i>	O														A	
Dollarbird	<i>Eurystomus orientalis</i>	O								A							
Superb Fairy-wren	<i>Malurus cyaneus</i>				A					A							
Spotted Pardalote	<i>Pardalotus punctatus</i>				A			A									
Striated Pardalote	<i>Pardalotus striatus</i>				A	A		A					A	A			A
Rockwarbler	<i>Origma solitaria</i>																
Weebill	<i>Smicromis brevirostris</i>					A				A		A	A	A			B
White-throated Gerygone	<i>Gerygone olivacea</i>					A				A					A		
Brown Thornbill	<i>Acanthiza pusilla</i>																
Buff-rumped Thornbill	<i>Acanthiza reguloides</i>							B		A		A					
Yellow-rumped	<i>Acanthiza</i>												A	A			

Table C.2 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 90-204 (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T90	T91	T113	T162	T164	T175	T176	T193	T194	T195	T196	T197	T198	T204
Thornbill	<i>chrysorrhoa</i>																
Yellow Thornbill	<i>Acanthiza nana</i>							B		A		B	A				
Striated Thornbill	<i>Acanthiza lineata</i>								A	B							
Southern Whiteface	<i>Aphelocephala leucopsis</i>											B					
Red Wattlebird	<i>Anthochaera carunculata</i>																A
Spiny-cheeked Honeyeater	<i>Acanthagenys rufogularis</i>																A
Striped Honeyeater	<i>Plectorhyncha lanceolata</i>																A
Noisy Friarbird	<i>Philemon corniculatus</i>							B							A	B	B Br
Little Friarbird	<i>Philemon citreogularis</i>					A									A	A	A Br
Yellow-faced Honeyeater	<i>Lichenostomus chrysops</i>			A									A			A	B Br
White-eared Honeyeater	<i>Lichenostomus leucotis</i>			A	A												

Table C.2 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 90-204 (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T90	T91	T113	T162	T164	T175	T176	T193	T194	T195	T196	T197	T198	T204
Fuscous Honeyeater	<i>Lichenostomus fuscus</i>																
White-plumed Honeyeater	<i>Lichenostomus penicillatus</i>				A											A	
Brown-headed Honeyeater	<i>Melithreptus brevirostris</i>																
White-naped Honeyeater	<i>Melithreptus lunatus</i>																
Eastern Spinebill	<i>Acanthorhynchus tenuirostris</i>				A												
Jacky Winter	<i>Microeca fascinans</i>													A			
Red-capped Robin	<i>Petroica goodenovii</i>											A					
Eastern Yellow Robin	<i>Eopsaltria australis</i>			A						A		A			A		
White-browed Babbler	<i>Pomatostomus superciliosus</i>			B								B					
Varied Sittella	<i>Daphoenositta chrysoptera</i>																

Table C.2 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 90-204 (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T90	T91	T113	T162	T164	T175	T176	T193	T194	T195	T196	T197	T198	T204
Crested Shrike-tit	<i>Falcunculus frontatus</i>														A		
Golden Whistler	<i>Pachycephala pectoralis</i>																
Rufous Whistler	<i>Pachycephala rufiventris</i>								A	A		A	A	A	A	A	A
Grey Shrike-thrush	<i>Colluricincla harmonica</i>							A								A	A
Restless Flycatcher	<i>Myiagra inquieta</i>															A	
Magpie-lark	<i>Grallina cyanoleuca</i>										A						A
Grey Fantail	<i>Rhipidura fuliginosa</i>							A									
Willie Wagtail	<i>Rhipidura leucophrys</i>											A	A				
Black-faced Cuckoo-shrike	<i>Coracina novaehollandiae</i>													A			
White-bellied Cuckoo-shrike	<i>Coracina papuensis</i>																

Table C.2 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 90-204 (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T90	T91	T113	T162	T164	T175	T176	T193	T194	T195	T196	T197	T198	T204
Cicadabird	<i>Coracina tenuirostris</i>																
White-winged Triller	<i>Lalage sueurii</i>															A	
Olive-backed Oriole	<i>Oriolus sagittatus</i>					A											
White-browed Woodswallow	<i>Artamus superciliosus</i>					B										B	B
Dusky Woodswallow	<i>Artamus cyanopterus</i>							A									
Grey Butcherbird	<i>Cracticus torquatus</i>					A										A	A
Pied Butcherbird	<i>Cracticus nigrogularis</i>								A						A	A	A
Australian Magpie	<i>Gymnorhina tibicen</i>				A	A	A				A	A					A
Pied Currawong	<i>Strepera graculina</i>			A						A							
Australian Raven	<i>Corvus coronoides</i>					A					A						A
White-winged Chough	<i>Corcorax melanorhamphos</i>					B									B		A

Table C.2 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 90-204 (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T90	T91	T113	T162	T164	T175	T176	T193	T194	T195	T196	T197	T198	T204
Apostlebird	<i>Struthidea cinerea</i>										B						B
Red-browed Finch	<i>Neochmia temporalis</i>																
Diamond Firetail	<i>Stagonopleura guttata</i>		V														
Mistletoebird	<i>Dicaeum hirundinaceum</i>			A	A						A		A		A		
Welcome Swallow	<i>Hirundo neoxena</i>							A				A			A	B	
Fairy Martin	<i>Hirundo ariel</i>														A	B	
Rufous Songlark	<i>Cincloramphus mathewsi</i>															A	A
Silvereye	<i>Zosterops lateralis</i>																
Barn Owl	<i>Tyto alba</i>																
Australian Owlet	<i>Aegotheles cristatus</i>															1	
Nightjar																	
Tawny Frogmouth	<i>Podargus strigoides</i>																
Southern Boobok	<i>Ninox</i>																

response

Table C.2 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 90-204 (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T90	T91	T113	T162	T164	T175	T176	T193	T194	T195	T196	T197	T198	T204
	<i>novaeseelandiae</i>																
Reptiles																	
Cunningham's	<i>Egernia</i>																
Spiny-tailed Skink	<i>cunninghami</i>																
Snake-necked	<i>Chelodina</i>																
Turtle	<i>longicollis</i>																
Robust Velvet	<i>Oedura robusta</i>									1							
Gecko																	
Eastern Stone	<i>Diplodactylus</i>									1					1		
Gecko	<i>vittatus</i>																
Two-clawed	<i>Anomalopus</i>						1										
Worm-skink	<i>leuckartii</i>																
South-eastern	<i>Morethia</i>					4						3	2	1		1	
Morethia Skink	<i>boulengeri</i>																
Coppertailed	<i>Ctenotus</i>						2		1			5		2		1	
Skink	<i>taeniolatus</i>																
Thick-tailed	<i>Underwoodisaurus</i>								1								
Gecko	<i>milii</i>																

Table C.2 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 90-204 (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T90	T91	T113	T162	T164	T175	T176	T193	T194	T195	T196	T197	T198	T204
White's Rock-skink	<i>Egernia whitii</i>												2	4			
Robust Ctenotus	<i>Ctenotus robustus</i>													4			
Tree Crevice-skink	<i>Egernia striolata</i>													1	5		
Lesueur's Velvet Gecko	<i>Oedura lesueurii</i>													1			
Variegated Dtella	<i>Gehyra variegata</i>															2	
Red-naped Snake	<i>Furina diadema</i>															1	
Bibron's Toadlet	<i>Pseudophryne bibroni</i>																
Invertebrates																	
Scorpion																	
European Bee	<i>Apis mellifera</i>																
Key																	
EPBC Status: E=Endangered, V=Vulnerable, O=Listed marine overfly area																	
TSC Status: E=Endangered, V=Vulnerable																	

Table C.2 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 90-204 (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T90	T91	T113	T162	T164	T175	T176	T193	T194	T195	T196	T197	T198	T204
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The number of animals observed is recorded with the following exceptions:

Hair tube results are expressed as a multiple of H

Microchiropteran bats are recorded as A (definite ID), B (probable ID) or C (possible ID)

Birds are recorded as A (abundance of 1-5), B (abundance of 6-20), C (abundance of 21-50) or Br (Exhibiting breeding behaviours)

Table C.3 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 205-268 AND RECORDS FROM THE STUDY AREA (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T205	T206	T207	T208	T209	T210	T211	T224	T225	T226	T227	T228	T267	T268	Other
Terrestrial																		
Mammals																		
Eastern Grey Kangaroo	<i>Macropus giganteus</i>					1		5			6	1						
Red Necked Wallaby	<i>Macropus rufogriseus</i>											1						
Wallaroo	<i>Macropus robustus</i>										5					1		

Table C.3 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 205-268 AND RECORDS FROM THE STUDY AREA (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T205	T206	T207	T208	T209	T210	T211	T224	T225	T226	T227	T228	T267	T268	Other
Red Kangaroo	<i>Macropus rufus</i>																	
Swamp Wallaby	<i>Wallabia bicolor</i>			3				1										
Short-beaked Echidna	<i>Tachyglossus aculeatus</i>																	
Wombat	<i>Vombatus ursinus</i>																	
Emu	<i>Dromaius novaehollandiae</i>																	
Brown Antechinus	<i>Antechinus stuartii</i>																	
Mouse	<i>Mus domesticus</i>				2, 6H	3H		5H		H		3H		3H				
Stripe-faced Dunnart	<i>Sminthopsis macroura</i>		V			H												
Common Dunnart	<i>Sminthopsis murina</i>																	
	<i>Sminthopsis</i> sp.																	
	<i>Dasyuridae</i>																	

Table C.3 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 205-268 AND RECORDS FROM THE STUDY AREA (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T205	T206	T207	T208	T209	T210	T211	T224	T225	T226	T227	T228	T267	T268	Other
Cat	<i>Felis catus</i>													H				
Fox	<i>Vulpes vulpes</i>																	
Rabbit	<i>Oryctolagus cuniculus</i>						1			3	warren/ 9	1	warren		2			
Cow				1														
Arboreal Mammals																		
Sugar Glider	<i>Petaurus breviceps</i>					call												
Brush-tail Possum	<i>Trichosurus vulpecula</i>					H	5		1	3H	1		3	2, H				
Ring-tail Possum	<i>Pseudocheirus peregrinus</i>							1						2H				
	<i>Petuaridae or Phalangeridae</i>									H								
	<i>Trichosurus vulpecula or Pseudocheirus</i>							H				H						

Table C.3 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 205-268 AND RECORDS FROM THE STUDY AREA (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T205	T206	T207	T208	T209	T210	T211	T224	T225	T226	T227	T228	T267	T268	Other
	<i>peregrinus</i>																	
Microchiropteran Bats																		
Eastern Freetail Bat	<i>Mormopterus species</i>					A												
Eastern Horseshoe Bat	<i>Rhinolophus megaphyllus</i>																	
Large-eared Pied Bat	<i>Chalinolobus dwyeri</i>	V	V															
Gould's Wattled Bat	<i>Chalinolobus gouldii</i>					C				B		C						
Common Bentwing Bat	<i>Miniopterus schreibersii</i>		V			C				B		B						

Table C.3 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 205-268 AND RECORDS FROM THE STUDY AREA (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T205	T206	T207	T208	T209	T210	T211	T224	T225	T226	T227	T228	T267	T268	Other
Unknown (eastern) Long-eared Bat	<i>Nyctophilus</i> sp. (<i>N. geoffroyi</i> , <i>N. gouldi</i> or vulnerable <i>N. timoriensis</i>)		V									A						
Eastern Cave Bat	<i>Vespadelus darlingtoni</i>																	
Southern Forest Bat	<i>Vespadelus regulus</i>					A												
Unknown Forest Bat	<i>Vespadelus regulus</i> or <i>V. vulturnus</i>									A		A						
Unknown Forest or Cave Bat	<i>Vespadelus</i> sp. (<i>V. pumilus</i> , <i>V. trougtoni</i> , <i>V. vulturnus</i> or <i>Chalinolobus morio</i>)																	
White-striped Freetail Bat	<i>Tadarida australis</i>																	

Table C.3 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 205-268 AND RECORDS FROM THE STUDY AREA (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T205	T206	T207	T208	T209	T210	T211	T224	T225	T226	T227	T228	T267	T268	Other
Yellow-bellied Sheath-tail Bat	<i>Saccolaimus flaviventris</i>											A						
Birds																		
Brown Quail	<i>Coturnix ypsilophora</i>																	
Crested Pigeon	<i>Ocyphaps lophotes</i>										A Br		A					
Peaceful Dove	<i>Geopelia striata</i>																	
Nankeen Kestrel	<i>Falco cenchroides</i>																	
Noisy Minor	<i>Manorina melanocephala</i>			7		3	A	A		A	A		A/5	A				
Common Bronzewing	<i>Phaps chalcoptera</i>			A														
Wedge-tailed Eagle	<i>Aquila audax</i>					1												

Table C.3 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 205-268 AND RECORDS FROM THE STUDY AREA (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T205	T206	T207	T208	T209	T210	T211	T224	T225	T226	T227	T228	T267	T268	Other
Brown Treecreeper	<i>Climacteris picumnus</i>		V					A Br										
White-throated Treecreeper	<i>Cormobates leucophaeus</i>			A														
Speckled Warbler	<i>Chthonicola sagittata</i>		V															
Glossy Black Cockatoo	<i>Calyptorhynchus lathami</i>	E	V															
Galah	<i>Cacatua roseicapilla</i>					A/2		A				A				A	A	
Sulphur-crested Cockatoo	<i>Cacatua galerita</i>																	
Musk Lorikeet	<i>Glossopsitta concinna</i>					A								A				
Little Lorikeet	<i>Glossopsitta pusilla</i>																	
Eastern Rosella	<i>Platycercus eximius</i>			A				A		A	A		A					

Table C.3 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 205-268 AND RECORDS FROM THE STUDY AREA (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T205	T206	T207	T208	T209	T210	T211	T224	T225	T226	T227	T228	T267	T268	Other
Red-rumped Parrot	<i>Psephotus haematonotus</i>					A												
Pallid Cuckoo	<i>Cuculus pallidus</i>																	
Laughing Kookaburra	<i>Dacelo novaeguineae</i>			A									A					
Sacred Kingfisher	<i>Todiramphus sanctus</i>																	
Rainbow Bee-eater	<i>Merops ornatus</i>	O																
Dollarbird	<i>Eurystomus orientalis</i>	O																
Superb Fairy-wren	<i>Malurus cyaneus</i>											A	A					
Spotted Pardalote	<i>Pardalotus punctatus</i>					A						A						
Striated Pardalote	<i>Pardalotus striatus</i>			A				A								A	A	
Rockwarbler	<i>Origma solitaria</i>																	

Table C.3 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 205-268 AND RECORDS FROM THE STUDY AREA (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T205	T206	T207	T208	T209	T210	T211	T224	T225	T226	T227	T228	T267	T268	Other
Weebill	<i>Smicromis brevirostris</i>			A				A						A		A	A	
White-throated Gerygone	<i>Gerygone olivacea</i>			A				A										
Brown Thornbill	<i>Acanthiza pusilla</i>																	
Buff-rumped Thornbill	<i>Acanthiza reguloides</i>				A	A	A					A	A					
Yellow-rumped Thornbill	<i>Acanthiza chrysorrhoa</i>			A		A		A								A	A	
Yellow Thornbill	<i>Acanthiza nana</i>						A	A				A	A		A			
Striated Thornbill	<i>Acanthiza lineata</i>			A								A						
Southern Whiteface	<i>Aphelocephala leucopsis</i>																	
Red Wattlebird	<i>Anthochaera carunculata</i>			A														

Table C.3 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 205-268 AND RECORDS FROM THE STUDY AREA (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T205	T206	T207	T208	T209	T210	T211	T224	T225	T226	T227	T228	T267	T268	Other
Spiny-cheeked Honeyeater	<i>Acanthagenys rufogularis</i>																	
Striped Honeyeater	<i>Plectorhyncha lanceolata</i>																	
Noisy Friarbird	<i>Philemon corniculatus</i>			A				A					A					
Little Friarbird	<i>Philemon citreogularis</i>			A														
Yellow-faced Honeyeater	<i>Lichenostomus chrysops</i>											A						
White-eared Honeyeater	<i>Lichenostomus leucotis</i>																	
Fuscous Honeyeater	<i>Lichenostomus fuscus</i>																	
White-plumed Honeyeater	<i>Lichenostomus penicillatus</i>																	
Brown-headed Honeyeater	<i>Melithreptus brevirostris</i>																	

Table C.3 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 205-268 AND RECORDS FROM THE STUDY AREA (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T205	T206	T207	T208	T209	T210	T211	T224	T225	T226	T227	T228	T267	T268	Other
White-naped Honeyeater	<i>Melithreptus lunatus</i>																	
Eastern Spinebill	<i>Acanthorhynchus tenuirostris</i>																	
Jacky Winter	<i>Microeca fascians</i>					A	A Br											
Red-capped Robin	<i>Petroica goodenovii</i>																	
Eastern Yellow Robin	<i>Eopsaltria australis</i>			A														
White-browed Babbler	<i>Pomatostomus superciliosus</i>																	
Varied Sittella	<i>Daphoenositta chrysoptera</i>																	
Crested Shrike-tit	<i>Falcunculus frontatus</i>																	
Golden Whistler	<i>Pachycephala pectoralis</i>																	

Table C.3 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 205-268 AND RECORDS FROM THE STUDY AREA (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T205	T206	T207	T208	T209	T210	T211	T224	T225	T226	T227	T228	T267	T268	Other
Rufous Whistler	<i>Pachycephala rufiventris</i>			A			A	A										
Grey Shrike-thrush	<i>Colluricincla harmonica</i>																	
Restless Flycatcher	<i>Myiagra inquieta</i>																	
Magpie-lark	<i>Grallina cyanoleuca</i>			A												A	A	
Grey Fantail	<i>Rhipidura fuliginosa</i>											A						
Willie Wagtail	<i>Rhipidura leucophrys</i>			A				A								A		
Black-faced Cuckoo-shrike	<i>Coracina novaehollandiae</i>			A	A	A		A				A			A	A	A	
White-bellied Cuckoo-shrike	<i>Coracina papuensis</i>																	
Cicadabird	<i>Coracina tenuirostris</i>																	

Table C.3 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 205-268 AND RECORDS FROM THE STUDY AREA (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T205	T206	T207	T208	T209	T210	T211	T224	T225	T226	T227	T228	T267	T268	Other
White-winged Triller	<i>Lalage sueurii</i>											A						
Olive-backed Oriole	<i>Oriolus sagittatus</i>																	
White-browed Woodswallow	<i>Artamus superciliosus</i>			A			A	A										
Dusky Woodswallow	<i>Artamus cyanopterus</i>																	
Grey Butcherbird	<i>Cracticus torquatus</i>			A				A		A				A	A			
Pied Butcherbird	<i>Cracticus nigrogularis</i>							A					A					
Australian Magpie	<i>Gymnorhina tibicen</i>										A						A	
Pied Currawong	<i>Strepera graculina</i>							A										
Australian Raven	<i>Corvus coronoides</i>																	

Table C.3 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 205-268 AND RECORDS FROM THE STUDY AREA (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T205	T206	T207	T208	T209	T210	T211	T224	T225	T226	T227	T228	T267	T268	Other
White-winged Chough	<i>Corcorax melanorhamphos</i>																A	
Apostlebird	<i>Struthidea cinerea</i>																	
Red-browed Finch	<i>Neochmia temporalis</i>																	
Diamond Firetail	<i>Stagonopleura guttata</i>		V					A										
Mistletoebird	<i>Dicaeum hirundinaceum</i>				A		A	A					A					
Welcome Swallow	<i>Hirundo neoxena</i>																	
Fairy Martin	<i>Hirundo ariel</i>																	
Rufous Songlark	<i>Cincloramphus mathewsi</i>							A			A							
Silvereye	<i>Zosterops lateralis</i>											A	B		B			
Barn Owl	<i>Tyto alba</i>					1												

Table C.3 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 205-268 AND RECORDS FROM THE STUDY AREA (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T205	T206	T207	T208	T209	T210	T211	T224	T225	T226	T227	T228	T267	T268	Other
Australian Owlet Nightjar	<i>Aegotheles cristatus</i>						1											
Tawny Frogmouth	<i>Podargus strigoides</i>																	1
Southern Boobok	<i>Ninox novaeseelandiae</i>																	
Reptiles																		
Cunningham's Spiny-tailed Skink	<i>Egernia cunninghami</i>				1										4			
Snake-necked Turtle	<i>Chelodina longicollis</i>																	
Robust Velvet Gecko	<i>Oedura robusta</i>						1		1									
Eastern Stone Gecko	<i>Diplodactylus vittatus</i>																	
Two-clawed Worm-skink	<i>Anomalopus leuckartii</i>																	

Table C.3 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 205-268 AND RECORDS FROM THE STUDY AREA (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T205	T206	T207	T208	T209	T210	T211	T224	T225	T226	T227	T228	T267	T268	Other
South-eastern Morethia Skink	<i>Morethia boulengeri</i>											1				1		
Coppertailed Skink	<i>Ctenotus taeniolatus</i>			2	1	1									1			
Thick-tailed Gecko	<i>Underwoodisaurus milii</i>																	
White's Rock-skink	<i>Egernia whitii</i>																	
Robust Ctenotus	<i>Ctenotus robustus</i>				1			1					1					
Tree Crevice-skink	<i>Egernia striolata</i>				2							2			5			
Lesueur's Velvet Gecko	<i>Oedura lesueurii</i>																	
Variegated Dtella	<i>Gehyra variegata</i>				1	1	1	1				4		1			1	
Red-naped Snake	<i>Furina diadema</i>																	
Bibron's Toadlet	<i>Pseudophryne</i>					1												

Table C.3 RESULTS OF FAUNA SURVEYS FOR TOWER LOCATIONS 205-268 AND RECORDS FROM THE STUDY AREA (KEY AT BOTTOM OF TABLE)

Common Name	Scientific Name	EPBC Status	TSC Status	T205	T206	T207	T208	T209	T210	T211	T224	T225	T226	T227	T228	T267	T268	Other
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bibroni

Invertebrates

Scorpion

many

European Bee

Apis mellifera

hive

Key

EPBC Status: E=Endangered, V=Vulnerable, O=Listed marine overfly area

TSC Status: E=Endangered, V=Vulnerable

The number of animals observed is recorded with the following exceptions:

Hair tube results are expressed as a multiple of H

Microchiropteran bats are recorded as A (definite ID), B (probable ID) or C (possible ID)

Birds are recorded as A (abundance of 1-5), B (abundance of 6-20), C (abundance of 21-50) or Br (Exhibiting breeding behaviours)

Appendix D

Results of Tree Hollow Survey

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
175	Yellow Box	No					12	6	25	Early mature	Healthy	Alive	0
175	Narrow-leaved Stringybark	No					10	4.5	30	Early mature	Healthy	Alive	0
175	Narrow-leaved Stringybark	No					9	7	15	Early mature	Healthy	Alive	0
175	Black Cypress Pine	No					11	2	35	Mature	Healthy	Alive	0
175	Yellow Box	No					11	3	25	Early mature	Healthy	Alive	0
175	Yellow Box	No					11	10	40	Mature	Healthy	Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
175	Black Cypress Pine	No					10	3	30	Mature	Healthy	Alive	0
175	Black Cypress Pine	No					7	1	25	Early mature	Healthy	Alive	0
175	Black Cypress Pine	No					5	0.5	12	Young	Healthy	Alive	0
175	Black Cypress Pine	No					6	2	20	Young	Healthy	Alive	0
175	Black Cypress Pine	No					4	0	17	Young	Dead	Stag	0
175	Black Cypress	No					7	2	20	Early mature	Healthy	Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
	Pine												
175	Yellow Box	No					7	7	45	Mature	Healthy	Alive	0
175	Black Cypress Pine	No					8	3.5	40	Late mature	Healthy	Alive	0
175	Black Cypress Pine	No					4	0.3	10	Young	Healthy	Alive	0
175	Yellow Box	No					5	2	7	Young	Healthy	Alive	0
175	Yellow Box	No					6	4	15	Young	Healthy	Alive	0
175	Yellow Box	No					4	1.5	7	Young	Healthy	Alive	0
175	Yellow Box	No					4	1	7	Young	Healthy	Alive	0
175	Black Cypress Pine	No					6	1	15	Young	Healthy	Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
175	Black Cypress Pine	No					6	1	10	Young	Healthy	Alive	0
175	Black Cypress Pine	No					8	5	40	Late mature	Dead	Stag	0
175	Black Cypress Pine	No					10	4	40	Mature	Stressed	Alive	0
175	Yellow Box	Yes	1	3	3-crown, 1-outer limb	18	20	8	110	Old growth	Healthy	Alive	4
175	Black Cypress Pine	No					9	3	40	Mature	Healthy	Alive	0
175	Yellow Box	No					10	3	25	Early mature	Healthy	Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
175	Yellow Box	No					10	3	25	Early mature	Healthy	Alive	0
175	Black Cypress Pine	No					7	2	20	Early mature	Healthy	Alive	0
175	Black Cypress Pine	No					11	5	45	Late mature	Healthy	Alive	0
175	Black Cypress Pine	No					9	4	35	Mature	Healthy	Alive	0
175	Yellow Box	Yes		1	Trunk	15	20	15	110	Old growth	Healthy	Alive	1
175	Yellow Box	No					8	7	25	Early mature	Healthy	Alive	0
175	Black Cypress Pine	No					12	5	15	Late mature	Dead	Stag	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
175	Yellow Box	No					7	6	45	Mature	Stressed	Alive	0
175	Black Cypress Pine	No					6	1	10	Early mature	Senescent	Alive	0
175	Black Cypress Pine	No					6	3	15	Early mature	Healthy	Alive	0
175	Black Cypress Pine	No					6	0	7	Young	Dead	Stag	0
175	Black Cypress Pine	No					6	1	7	Young	Stressed	Alive	0
175	Black Cypress Pine	No					6	1	15	Young	Stressed	Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
175	Black Cypress Pine	No					6	1	15	Young	Healthy	Alive	0
175	Black Cypress Pine	No					4	1	7	Young	Healthy	Alive	0
175	Black Cypress Pine	No					6	1	15	Young	Healthy	Alive	0
175	Black Cypress Pine	No					6	1	15	Young	Stressed	Alive	0
175	Black Cypress Pine	No					6	0	20	Early mature	Dead	Stag	0
175	Black Cypress	No					5	1	7	Young	Healthy	Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
	Pine												
175	Black Cypress Pine	No					8	1.5	20	Early mature	Healthy	Alive	0
175	Black Cypress Pine	No					5	3	10	Young	Healthy	Alive	0
175	Black Cypress Pine	No					8	2	25	Early mature	Healthy	Alive	0
175	Black Cypress Pine	No					7	4	20	Early mature	Healthy	Alive	0
175	Black Cypress Pine	No					9	3	30	Early mature	Healthy	Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
175	Black Cypress Pine	No					6	1	15	Young	Healthy	Alive	0
175	Narrow-leaved Stringybark	No					6	6	35	Mature	Healthy	Alive	0
175	Black Cypress Pine	No					8	2	20	Early mature	Healthy	Alive	0
175	Black Cypress Pine	No					7	2	20	Early mature	Healthy	Alive	0
175	Black Cypress Pine	No					8	2	20	Early mature	Healthy	Alive	0
175	Black Cypress	No					8	3	22	Early mature	Healthy	Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
	Pine												
175	Black Cypress Pine	No					8	3	20	Mature	Healthy	Alive	0
175	Black Cypress Pine	No					8	3	20	Mature	Healthy	Alive	0
175	Black Cypress Pine	No					4	1	6	Mature	Healthy	Alive	0
175	Black Cypress Pine	No					8	3	15	Mature	Healthy	Alive	0
175	Black Cypress Pine	No					4	1	6	Young	Healthy	Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
175	Black Cypress Pine	No					5	1	7	Young	Healthy	Alive	0
175	Black Cypress Pine	No					8	3	25	Mature	Healthy	Alive	0
175	Black Cypress Pine	No					4	1	10	Early mature	Dead	Stag	0
175	Black Cypress Pine	No					8	2	22	Early mature	Healthy	Alive	0
175	Yellow Box	No					5	4	12	Young	Healthy	Alive	0
175	Narrow-leaved Stringybark	No					7	5	20	Early mature	Healthy	Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
175	Narrow-leaved Stringybark	No					5	2	10	Young	Healthy	Alive	0
175	Narrow-leaved Stringybark	No					8	4	30	Mature	Dead	Stag	0
175	Narrow-leaved Stringybark	No					9	5	20	Early mature	Healthy	Alive	0
164	Tumble-down Red Gum	No							15			Alive	0
164	Tumble-down Red Gum	No							20			Alive	0
164	Tumble-down Red	No							25			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
	Gum												
164	Tumble-down Red Gum	No							35			Alive	0
164	Tumble-down Red Gum	No							45			Alive	0
164	Black Cypress Pine	No							20			Alive	0
164	Black Cypress Pine	No							40			Alive	0
164	Black Cypress Pine	No							50			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
164	Black Cypress Pine	No							30			Alive	0
164	Black Cypress Pine	No							30			Alive	0
164	Black Cypress Pine	No							30			Alive	0
164	Black Cypress Pine	No							30			Alive	0
164	Tumble-down Red Gum	No							25			Alive	0
164	Tumble-down Red	No							35			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
	Gum												
164	Tumble-down Red Gum	No							35			Alive	0
164	Black Cypress Pine	No							20			Alive	0
164	Black Cypress Pine	No							20			Alive	0
164	Black Cypress Pine	No							20			Alive	0
164	Black Cypress Pine	No							20			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
164	Black Cypress Pine	No							30			Alive	0
164	Tumble-down Red Gum	Yes	2						30		Dead	Stag	2
164	Tumble-down Red Gum	No							15			Alive	0
164	Tumble-down Red Gum	No							25			Alive	0
164	Tumble-down Red Gum	No							15		Dead	Stag	0
164	Tumble-down Red	No							15		Dead	Stag	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
	Gum												
164	Tumble-down Red Gum	No							20		Dead	Stag	0
164	Black Cypress Pine	No							15			Alive	0
164	Black Cypress Pine	No							20			Alive	0
164	Black Cypress Pine	No							30			Alive	0
164	Black Cypress Pine	No							20			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
164	Black Cypress Pine	No							20			Alive	0
164	Black Cypress Pine	No							40			Alive	0
164	Black Cypress Pine	No							20			Alive	0
164	Black Cypress Pine	No							15			Alive	0
164	Black Cypress Pine	No							10			Alive	0
164	Black Cypress	No							8			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
	Pine												
164	Black Cypress Pine	No							20			Alive	0
164	Tumble-down Red Gum	No							10			Alive	0
164	Tumble-down Red Gum	No							15			Alive	0
164	Tumble-down Red Gum	No							10			Alive	0
164	Tumble-down Red Gum	No							10			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
164	Narrow-leaved Stringybark	No							10			Alive	0
164	unidentified	No							70		Dead	Stag	0
164	unidentified	Yes	2						20		Dead	Stag	2
164	unidentified	No							10		Dead	Stag	0
164	unidentified	No							10		Dead	Stag	0
164	unidentified	Yes		2					40		Dead	Stag	2
164	unidentified	Yes	1						15		Dead	Stag	1
164	Black Cypress Pine	No							20			Alive	0
164	Black Cypress Pine	No							30			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
164	Black Cypress Pine	No							30			Alive	0
164	Black Cypress Pine	No							20			Alive	0
164	Black Cypress Pine	No							20			Alive	0
164	Black Cypress Pine	No							25			Alive	0
164	Black Cypress Pine	No							15			Alive	0
164	Black Cypress	No							15			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
	Pine												
164	Black Cypress Pine	No							15			Alive	0
164	Black Cypress Pine	No							10			Alive	0
164	Narrow-leaved Stringybark	No							20			Alive	0
164	Narrow-leaved Stringybark	No							20			Alive	0
164	Narrow-leaved Stringybark	No							15			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
164	Narrow-leaved Stringybark	No							15			Alive	0
164	Narrow-leaved Stringybark	No							10			Alive	0
164	Narrow-leaved Stringybark	No							15			Alive	0
164	Narrow-leaved Stringybark	No							15			Alive	0
164	Narrow-leaved Stringybark	No							20			Alive	0
164	Narrow-leaved	No							15			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
	Stringybark												
164	Tumble-down Red Gum	No							10			Alive	0
164	Tumble-down Red Gum	No							15			Alive	0
164	Tumble-down Red Gum	No							15			Alive	0
164	Tumble-down Red Gum	No							15			Alive	0
164	Tumble-down Red Gum	No							10			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
164	Tumble-down Red Gum	No							10			Alive	0
195	Tumble-down Red Gum	No							10			Alive	0
195	Tumble-down Red Gum	No							10			Alive	0
195	Tumble-down Red Gum	No							20			Alive	0
195	Tumble-down Red Gum	No							8			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
195	Tumble-down Red Gum	No							10			Alive	0
195	Tumble-down Red Gum	No							20			Alive	0
195	Tumble-down Red Gum	No							30			Alive	0
195	Tumble-down Red Gum	No							10			Alive	0
195	Tumble-down Red Gum	No							15			Alive	0
195	Tumble-down Red	No							30			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
	Gum												
195	Tumble-down Red Gum	No							15			Alive	0
195	Tumble-down Red Gum	No							15			Alive	0
195	Tumble-down Red Gum	No							10			Alive	0
195	Tumble-down Red Gum	No							10			Alive	0
195	Tumble-down Red Gum	No							15			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
195	Tumble-down Red Gum	No							15			Alive	0
195	Black Cypress Pine	No							30			Alive	0
195	Black Cypress Pine	No							20			Alive	0
195	Black Cypress Pine	No							15			Alive	0
195	Unidentified	yes	2						20			stag	2
195	Unidentified	No							30			stag	0
195	Unidentified	No							10			stag	0
195	Unidentified	yes	3						25			stag	3

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics				Tree Characteristics							
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
195	Unidentified	yes	1						15			stag	1
195	White Box	No							50			Alive	0
195	Unidentified	No	1						40			stag	1
197	Yellow Box	No							10			Alive	0
197	Yellow Box	No							10			Alive	0
197	Yellow Box	No							10			Alive	0
197	Yellow Box	No							5			Alive	0
197	Yellow Box	No							10			Alive	0
197	Yellow Box	No							10			Alive	0
197	Yellow Box	No							10			Alive	0
197	Yellow Box	No							25			Alive	0
197	Yellow Box	No							10			Alive	0
197	Yellow Box	No							15			Alive	0
197	Yellow Box	No							15			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
197	Yellow Box	No							10			Alive	0
197	Yellow Box	No							10			Alive	0
197	Yellow Box	No							10			Alive	0
197	Yellow Box	No							20			Alive	0
197	Yellow Box	No							10			Alive	0
197	Yellow Box	No							10			Alive	0
197	Yellow Box	No							10			Alive	0
197	Yellow Box	No							10			Alive	0
197	Yellow Box	No							10			Alive	0
197	Yellow Box	No							10			Alive	0
197	Yellow Box	No							5			Alive	0
197	Yellow Box	No							5			Alive	0
197	Yellow Box	No							10			Alive	0
209	White Box	No							10			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
209	White Box	No							10			Alive	0
209	White Box	No							10			Alive	0
209	White Box	Yes	4						40			Alive	4
209	White Box	Yes	3	2					50			Alive	5
209	White Box	No							10			Alive	0
209	White Box	No							15			Alive	0
209	White Box	Yes	1						60			Alive	1
209	White Box	No							20			Alive	0
209	White Box	No							15			Alive	0
209	White Box	No							15			Alive	0
209	White Box	No							10			Alive	0
209	White Box	No							10			Alive	0
209	White Box	No							10			Alive	0
209	White Box	No							20		Dead	Stag	0
209	White Box	No							10			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
209	White Box	No							15			Alive	0
209	White Box	No							15			Alive	0
209	White Box	No							10			Alive	0
209	Tumble-down Red Gum	No							15			Alive	0
209	Tumble-down Red Gum	No							15			Alive	0
209	Tumble-down Red Gum	No							15			Alive	0
209	Tumble-down Red Gum	No							15			Alive	0
209	Tumble-	No							20			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
209	down Red Gum	No							15			Alive	0
209	Tumble-down Red Gum	No							15			Alive	0
209	Tumble-down Red Gum	No							20			Alive	0
209	Tumble-down Red Gum	No							15			Alive	0
209	Tumble-down Red Gum	No							20			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
209	White Box	Yes	1						40			Dead	1
209	White Box	No							15			Alive	0
209	White Box	No							20			Alive	0
209	White Box	No							10			Alive	0
209	White Box	No							10			Alive	0
209	White Box	No							20			Alive	0
209	White Box	No							20			Alive	0
209	White Box	No							15			Alive	0
207	Kurrajong	No							45			Alive	0
207	Unidentified	Yes		1					40		Dead	Stag	1
207	Unidentified	Yes	3	1					50		Dead	Stag	4
207	Tumble-down Red Gum	No							15			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
207	Tumble-down Red Gum	No							10			Alive	0
207	Tumble-down Red Gum	No							10			Alive	0
207	Tumble-down Red Gum	No							15			Alive	0
207	Tumble-down Red Gum	No							10			Alive	0
207	Tumble-down Red Gum	No							10			Alive	0
207	Tumble-down Red	No							15			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
	Gum												
207	Tumble-down Red Gum	No							10			Alive	0
207	Tumble-down Red Gum	No							15			Alive	0
207	Tumble-down Red Gum	No							10			Alive	0
207	White Box	No							20			Alive	0
207	White Box	No							10			Alive	0
207	White Box	No							10			Alive	0
207	White Box	No							10			Alive	0
207	White Box	No							20			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
207	White Box	No							20			Alive	0
207	White Box	No							10			Alive	0
207	White Box	No							15			Alive	0
207	White Box	No							5			Alive	0
207	White Box	No							10			Alive	0
207	Yellow Box	No							10			Alive	0
207	Yellow Box	No							20			Alive	0
207	Yellow Box	No							25			Alive	0
207	Yellow Box	No							35			Alive	0
207	Yellow Box	No							25			Alive	0
207	Rough-barked Apple	No							10			Alive	0
86	Tumble-	No							10			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
86	down Red Gum	No							5			Alive	0
86	Tumble-down Red Gum	No							10			Alive	0
86	Tumble-down Red Gum	No							10			Alive	0
86	Tumble-down Red Gum	No							10			Alive	0
86	Tumble-down Red Gum	No							20			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
86	Black Cypress Pine	No							10			Alive	0
86	Black Cypress Pine	No							10			Alive	0
86	Black Cypress Pine	No							15			Alive	0
86	Black Cypress Pine	No							10			Alive	0
86	Black Cypress Pine	No							10		Dead	Stag	0
86	Black Cypress	No							10		Dead	Stag	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
	Pine												
86	Drooping She-oak	No							15			Alive	0
86	Drooping She-oak	No							10			Alive	0
86	Drooping She-oak	No							5			Alive	0
86	Drooping She-oak	No							10			Alive	0
86	Drooping She-oak	No							10			Alive	0
86	Drooping She-oak	No							10			Alive	0
86	Drooping She-oak	No							10			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
86	Drooping She-oak	No							10			Alive	0
86	Drooping She-oak	No							100			Alive	0
86	Drooping She-oak	No							15			Alive	0
86	Drooping She-oak	No							15			Alive	0
86	Drooping She-oak	No							15			Alive	0
86	Drooping She-oak	No							10			Alive	0
86	Drooping She-oak	No							15			Alive	0
86	Drooping She-oak	No							20			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
86	Drooping She-oak	No							20			Alive	0
86	Drooping She-oak	No							10		Dead	Stag	0
86	Drooping She-oak	No							5			Alive	0
86	Drooping She-oak	No							5			Alive	0
86	Drooping She-oak	No							5			Alive	0
86	Drooping She-oak	No							5		Dead	Stag	0
86	Unidentified	No							10			Alive	0
86	Unidentified	Yes		1					30			Alive	1
86	Kurrajong	No							20			Alive	0
86	Hickory	No							10			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
	Wattle												
86	Hickory	No							10			Alive	0
	Wattle												
86	Hickory	No							10			Alive	0
	Wattle												
86	Hickory	No							10		Dead	Stag	0
	Wattle												
86	Hickory	No							10			Alive	0
	Wattle												
86	Hickory	No							10		Dead	Stag	0
	Wattle												
86	Hickory	No							15			Alive	0
	Wattle												
86	Hickory	No							10			Alive	0
	Wattle												
86	Hickory	No							10			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
	Wattle												
86	Hickory Wattle	No							10			Alive	0
86	Hickory Wattle	No							20			Alive	0
86	Hickory Wattle	No							10		Dead	Stag	0
86	Hickory Wattle	No							5		Dead	Stag	0
86	Hickory Wattle	No							10			Alive	0
86	Rough-barked Apple	No							10			Alive	0
86	Rough-barked Apple	No							5			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
86	Rough-barked Apple	No							5			Alive	0
86	Rough-barked Apple	No							5			Alive	0
86	Rough-barked Apple	No							10			Alive	0
86	Rough-barked Apple	No							15			Alive	0
225	Rough-barked Apple	Yes		2					60			Alive	2

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
225	Black Cypress Pine	No							40		Dead	Stag	0
225	Black Cypress Pine	No							30		Dead	Stag	0
225	Kurrajong	No							30			Alive	0
225	Kurrajong	No							30			Alive	0
225	Blakely's Red Gum	No							50			Alive	0
225	Blakely's Red Gum	No							30			Alive	0
225	Blakely's Red Gum	No							15			Alive	0
225	White Box	Yes	3						40			Alive	3
225	Unidentified	No							20		Dead	Stag	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
225	Unidentified	No							20		Dead	Stag	0
225	Unidentified	No							10		Dead	Stag	0
225	Round Leaved Gum	Yes	3						50			Alive	3
113	Inland Grey Box	No							30			Alive	0
113	Inland Grey Box	No							30			Alive	0
113	Inland Grey Box	No							20			Alive	0
113	Inland Grey Box	Yes	1						35			Alive	1
113	Inland Grey Box	No							35			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
113	Inland Grey Box	No							20			Alive	0
113	Inland Grey Box	No							20		Dead	Stag	0
113	Inland Grey Box	Yes	1						15			Alive	1
113	Inland Grey Box	No							25			Alive	0
113	Inland Grey Box	Yes	1						30			Alive	1
113	Inland Grey Box	No							15			Alive	0
113	Inland Grey Box	No							30			Alive	0
113	Inland Grey Box	No							20			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							40			Alive	0
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							15			Alive	0
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							20			Alive	0
113	Inland Grey Box	No							15			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
113	Inland Grey Box	Yes		1					20			Alive	1
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							15			Alive	0
113	Inland Grey Box	No							10		Dead	Stag	0
113	Inland Grey Box	No							10		Dead	Stag	0
113	Inland Grey Box	No							15			Alive	0
113	Inland Grey Box	No							10		Dead	Stag	0
113	Inland Grey Box	No							10			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							15			Alive	0
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							10		Dead	Stag	0
113	Inland Grey Box	No							20			Alive	0
113	Inland Grey Box	No							20		Dead	Alive	0
113	Inland Grey Box	No							20		Dead	Stag	0
113	Inland Grey Box	No							30		Dead	Stag	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
113	Inland Grey Box	No							40			Alive	0
113	Inland Grey Box	No							30			Alive	0
113	Inland Grey Box	No							30			Alive	0
113	Inland Grey Box	No							20			Alive	0
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							15			Alive	0
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							20			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
113	Inland Grey Box	No							15			Alive	0
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							15			Alive	0
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							5			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
113	Inland Grey Box	No							15			Alive	0
113	Inland Grey Box	No							15			Alive	0
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							15			Alive	0
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							15			Alive	0
113	Inland Grey Box	No							5			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
113	Inland Grey Box	No							5			Alive	0
113	Inland Grey Box	Yes	2						20			Alive	2
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							10			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
113	Inland Grey Box	No							5			Alive	0
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							10			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							20			Alive	0
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	Yes	1						30			Alive	1

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
113	Inland Grey Box	No							30			Alive	0
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							15			Alive	0
113	Inland Grey Box	Yes	1						20			Alive	1
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							10			Alive	0
113	Inland Grey Box	No							15			Alive	0
113	Inland Grey Box	No							20			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
113	Tumble-down Red Gum	Yes		1					40			Alive	1
113	Tumble-down Red Gum	No							10			Alive	0
113	Tumble-down Red Gum	No							10			Alive	0
113	Tumble-down Red Gum	No							15			Alive	0
113	Tumble-down Red Gum	No							15			Alive	0
113	Tumble-down Red	No							10			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
	Gum												
113	Tumble-down Red Gum	No							10			Alive	0
113	Tumble-down Red Gum	No							10			Alive	0
113	Tumble-down Red Gum	No							25			Alive	0
113	Tumble-down Red Gum	No							40			Alive	0
113	Tumble-down Red Gum	Yes	1						40			Alive	1

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
113	Tumble-down Red Gum	No							10			Alive	0
113	Tumble-down Red Gum	No							15			Alive	0
113	Tumble-down Red Gum	Yes	2	3					60		half dead	Alive	5
113	Tumble-down Red Gum	No							10			Alive	0
113	Tumble-down Red Gum	No							10			Alive	0
113	Tumble-down Red	No							15			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
	Gum												
113	Tumble-down Red Gum	No							15			Alive	0
113	Tumble-down Red Gum	No							10			Alive	0
113	Tumble-down Red Gum	No							20			Alive	0
113	Tumble-down Red Gum	No							10			Alive	0
113	Tumble-down Red Gum	No							15			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
113	Tumble-down Red Gum	No							15			Alive	0
113	Tumble-down Red Gum	Yes	1						10			Alive	1
113	Tumble-down Red Gum	No							15			Alive	0
113	Tumble-down Red Gum	No							15			Alive	0
113	Tumble-down Red Gum	No							20		Dead	Stag	0
113	Tumble-down Red	No							15			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
	Gum												
113	Tumble-down Red Gum	No							15			Alive	0
113	Tumble-down Red Gum	No							15			Alive	0
113	Tumble-down Red Gum	No							20			Alive	0
113	Tumble-down Red Gum	Yes	1						50			Alive	1
113	Tumble-down Red Gum	No							20			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
113	Tumble-down Red Gum	No							15			Alive	0
113	Tumble-down Red Gum	No							10			Alive	0
113	Tumble-down Red Gum	No							25			Alive	0
113	Tumble-down Red Gum	No							30			Alive	0
113	Unidentified	No							25			Alive	0
113	Unidentified	No							20			Alive	0
113	Unidentified	Yes	3						15			Alive	3
113	Unidentified	No							10			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
113	Unidentified	No							10			Alive	0
113	Unidentified	No							15			Alive	0
113	Unidentified	Yes		1					40			Alive	1
113	Unidentified	No							15			Alive	0
113	Unidentified	No							10			Alive	0
113	Unidentified	No							10			Alive	0
113	Unidentified	No							10			Alive	0
113	Unidentified	No							10			Alive	0
113	Unidentified	No							10			Alive	0
113	Unidentified	No							10			Alive	0
113	Unidentified	No							30			Alive	0
B/W 56&57	Broad-leaved Ironbark	No							30			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
B/W 56&57	Broad-leaved Ironbark	No							20			Alive	0
B/W 56&57	Broad-leaved Ironbark	No							15			Alive	0
B/W 56&57	Broad-leaved Ironbark	No							15			Alive	0
B/W 56&57	Broad-leaved Ironbark	No							30			Alive	0
B/W 56&57	Broad-leaved Ironbark	No							30			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
B/W 56&57	Broad-leaved Ironbark	No							10			Alive	0
B/W 56&57	Broad-leaved Ironbark	No							10			Alive	0
B/W 56&57	Broad-leaved Ironbark	No							20			Alive	0
B/W 56&57	Broad-leaved Ironbark	No							15			Alive	0
B/W 56&57	Broad-leaved Ironbark	No							10			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
B/W 56&57	Broad-leaved Ironbark	Yes		1					40		Dead	Stag	1
B/W 56&57	Broad-leaved Ironbark	No							30			Alive	0
B/W 56&57	Broad-leaved Ironbark	No							30			Alive	0
B/W 56&57	Broad-leaved Ironbark	Yes	2						40			Alive	2
B/W 56&57	Broad-leaved Ironbark	No							30			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
B/W 56&57	Broad-leaved Ironbark	Yes	2						40			Alive	2
B/W 56&57	Broad-leaved Ironbark	No							10			Alive	0
B/W 56&57	Broad-leaved Ironbark	No							30			Alive	0
B/W 56&57	Broad-leaved Ironbark	No							10			Alive	0
B/W 56&57	Broad-leaved Ironbark	No							30			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
B/W 56&57	Broad-leaved Ironbark	No							15			Alive	0
B/W 56&57	Broad-leaved Ironbark	No							20			Alive	0
B/W 56&57	Broad-leaved Ironbark	Yes	1						30			Alive	1
B/W 56&57	Broad-leaved Ironbark	No							25			Alive	0
B/W 56&57	Broad-leaved Ironbark	Yes	2						40			Alive	2

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
B/W 56&57	Broad-leaved Ironbark	No							10			Alive	0
B/W 56&57	Broad-leaved Ironbark	No							10			Alive	0
B/W 56&57	Broad-leaved Ironbark	No							15			Alive	0
B/W 56&57	Broad-leaved Ironbark	No							10			Alive	0
B/W 56&57	Broad-leaved Ironbark	No							10			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
B/W 56&57	Broad-leaved Ironbark	No							10			Alive	0
B/W 56&57	Broad-leaved Ironbark	No							30			Alive	0
B/W 56&57	Broad-leaved Ironbark	No							15			Alive	0
B/W 56&57	Broad-leaved Ironbark	No							25			Alive	0
B/W 56&57	Broad-leaved Ironbark	No							10			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
B/W 56&57	Broad-leaved Ironbark	No							10			Alive	0
B/W 56&57	Broad-leaved Ironbark	No							10			Alive	0
B/W 56&57	Broad-leaved Ironbark	No							10			Alive	0
B/W 56&57	Broad-leaved Ironbark	No							30			Alive	0
B/W 56&57	Broad-leaved Ironbark	No							10			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
B/W 56&57	Tumble-down Red Gum	No							15			Alive	0
B/W 56&57	Tumble-down Red Gum	No							20			Alive	0
B/W 56&57	Black Cypress Pine	No							15			Alive	0
B/W 56&57	Black Cypress Pine	No							15			Alive	0
B/W 56&57	Black Cypress Pine	No							10			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
B/W 56&57	Black Cypress Pine	No							10			Alive	0
B/W 56&57	Black Cypress Pine	No							5			Alive	0
B/W 56&57	Black Cypress Pine	No							10			Alive	0
B/W 56&57	Black Cypress Pine	No							10			Alive	0
B/W 56&57	Black Cypress Pine	No							10			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
B/W 56&57	Black Cypress Pine	No							10			Alive	0
B/W 56&57	Black Cypress Pine	No							10			Alive	0
B/W 56&57	Black Cypress Pine	No							10			Alive	0
B/W 56&57	Black Cypress Pine	No							10			Alive	0
B/W 56&57	Black Cypress Pine	No							10			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
B/W 56&57	Black Cypress Pine	No							10			Alive	0
B/W 56&57	Unidentified	Yes	1	1					30		Dead	Stag	2
B/W 56&57	Unidentified	No							10			Alive	0
B/W 56&57	Narrow-leaved Stringybark	No							10			Alive	0
B/W 56&57	Narrow-leaved Stringybark	No							10			Alive	0
B/W 56&57	Narrow-leaved Stringybark	No							20			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
B/W 56&57	Narrow-leaved Stringybark	No							20			Alive	0
15	White Box	No							40			Alive	0
15	White Box	No							20			Alive	0
15	White Box	No							20			Alive	0
15	White Box	No							20			Alive	0
15	White Box	No							30			Alive	0
15	White Box	No							20			Alive	0
15	White Box	No							20			Alive	0
15	White Box	No							20			Alive	0
15	White Box	No							20			Alive	0
15	White Box	No							30			Alive	0
15	White Box	No							20			Alive	0

Table D.1 RESULTS OF TREE HOLLOW SURVEY

Tower number	Tree Species	Hollow Characteristics					Tree Characteristics						
		Apparent hollows	Small <15cm	Large >15cm	Position of hollow in tree	Height of hollow entrance (m)	Height (m)	Crown diameter (m)	Dbh (cm)	Growth stage	Health condition	Alive/ stag	Total hollows per tree
15	White Box	No							20			Alive	0
15	White Box	No							30			Alive	0
15	White Box	No							20			Alive	0
15	White Box	Yes	1						50			Alive	1
15	White Box	No							20			Alive	0
15	White Box	No							24			Alive	0
15	White Box	No							40			Alive	0
15	White Box	No							30			Alive	0
15	White Box	No							20			Alive	0
15	White Box	Yes	1						10		Dead	Stag	1
15	White Box	Yes	2	1									3

Appendix E

Habitat Modification and Presence of Weeds

Table E.1 PERCENTAGE OF WEEDS RECORDED IN VEGETATION STRATA DURING FLORA SURVEY AND HABITAT MODIFICATION OF THE VEGETATION COMMUNITY

Survey location (Tower number)	Vegetation community	Weeds in canopy	Weeds in shrub layer	Weeds in ground cover	Modified community?
15	White Box Woodland	0	0	5	Yes
16	Cleared/Partially Cleared	0	0	10	Regrowth
17	White Box - Inland Grey Box Woodland	0	0	2	Yes
56	Black Cypress Pine - Broad-leaved Ironbark Woodland	0	0	0	No
57	Black Cypress Pine - Broad-leaved Ironbark Woodland	0	0	0	No
58	Black Cypress Pine - Broad-leaved Ironbark Woodland	0	0	0	No
83	Ecotone White Box Woodland - Black Cypress Pine Woodland	0	0	1	No
84	Black Cypress Pine - Tumbledown Red Gum Woodland	0	0	1	No
85	Black Cypress Pine - Tumbledown Red Gum Woodland	0		1	No
86	Black Cypress Pine - Tumbledown Red Gum Woodland	0		1	No
87	Black Cypress Pine - Tumbledown Red Gum Woodland	0		1	No
88	Black Cypress Pine - Tumbledown Red Gum Woodland	0		0	No
89	Yellow Box - Blakely's Red Gum Woodland	0		10	No
90	Black Cypress Pine - Tumbledown Red Gum Woodland	0	0	0	No

Table E.1 PERCENTAGE OF WEEDS RECORDED IN VEGETATION STRATA DURING FLORA SURVEY AND HABITAT MODIFICATION OF THE VEGETATION COMMUNITY

Survey location (Tower number)	Vegetation community	Weeds in canopy	Weeds in shrub layer	Weeds in ground cover	Modified community?
91	Blakely's Red Gum Woodland	0		10	No
117	White Box - Inland Grey Box Woodland	0	0	1	No
162	Black Cypress Pine - Tumbledown Red Gum Woodland	0	0	1	No
164	Black Cypress Pine - Tumbledown Red Gum Woodland	0	0	1	No
175	Black Cypress Pine - Red Box Woodland	0	0	0	No
176	Black Cypress Pine - Red Box Woodland	0	0	0	No
194	Black Cypress Pine - White Box Woodland	0		20	No
195	Black Cypress Pine - Red Box Woodland	0		5	Yes
196	Cleared/Partially Cleared			90	Yes
197	Yellow Box - White Box Woodland	0	0	10	Yes
198	Yellow Box - White Box Woodland	0		10	Yes
204	Black Cypress Pine - Tumbledown Red Gum Woodland	0		5	Yes
205	Black Cypress Pine - Tumbledown Red Gum Woodland	0	0	5	Yes
206	Yellow Box - White Box Woodland	0	0	5	Yes
207	Yellow Box - White Box Woodland	0		10	Yes
208	White Box Woodland	0		30	Yes

Table E.1 PERCENTAGE OF WEEDS RECORDED IN VEGETATION STRATA DURING FLORA SURVEY AND HABITAT MODIFICATION OF THE VEGETATION COMMUNITY

Survey location (Tower number)	Vegetation community	Weeds in canopy	Weeds in shrub layer	Weeds in ground cover	Modified community?
209	White Box Woodland	0		40	Yes
210	Exotic Pasture and Cropland			80	Yes
211	White Box Woodland	0	0	5	Yes
224	Exotic Pasture and Cropland	0		80	Yes
225	White Box Woodland	0		70	Yes
226	Exotic Pasture and Cropland			90	Yes
227	Yellow Box - White Box Woodland	0		80	Yes
228	Yellow Box - White Box Woodland	0		80	Yes
229	Exotic Pasture and Cropland			90	Yes
267	Exotic Pasture and Cropland			70	Yes
268	White Box Woodland	0		70	Yes

Appendix F

Curricula Vitae of Project Team

Dr David Robertson

Director, Cumberland Ecology

Dr David Robertson is a senior ecologist with more than 20 years experience in ecological survey and research. David is currently the director of Cumberland Ecology. He has a bachelor of science with majors in botany and zoology and a PhD in ecology.

Recent consultancy work has included:

- management of high level flora and fauna investigations for Environmental Impact Assessments;
- threatened species investigations;
- development of ecological management plans;
- habitat reconstruction;
- development of packages for compensatory habitats;
- management of negotiations about the level of mitigation measures required for flora and fauna impacts;
- bushfire assessments;
- biological monitoring of rivers, streams and lakes and
- ecological risk assessment.

David is also very experienced at public speaking and has regularly provided expert testimony in court about ecological issues.

In previous work David was employed as the senior ecologist in charge of the Ecological Services Practice for ERM Australia. He also lectured in ecology and aquatic biology at Charles Sturt University, and was also employed as a senior ecologist with the Australian Museum. Currently, David lectures part time about ecology and environmental impact assessment at the Australian Catholic University.

David has skills that allow him to work in both aquatic and terrestrial flora and fauna inventory, management of threatened species, ecological risk assessment, wetland rehabilitation and management, and ecological research for environmental impact assessment.

Professional Affiliations and Registrations

- Ecological Society of Australia, Wildlife Society, Australian Society for Limnology, Frog and Tadpole Society.

Fields of Competence

- Biodiversity issues, flora and fauna field surveys, aquatic ecology, biological monitoring and

environmental impact assessment.

- Bushfire assessments.
- Provision of strategic advice relating to the ecological issues that must be considered for land purchase, development and management.

Key Industry Sectors

- Mining
- Power
- Water
- Transport

Education

- Bachelor of Science (Honours), Ecology, University of Melbourne, 1980.
- Doctor of Philosophy, Ecology, University of Melbourne, 1986.

Languages

- English
- Spanish

Key Projects

Environmental Impact Assessment

David has directed numerous large ecological assessments for major EIA projects in a variety of service sectors. These include the power industry, water supply, road construction and mining. Experience in ecological impact assessment for the power industry includes work done for Pacific Power, Transgrid, Powercoal, NorthPower and Powerlink.

Threatened species assessments

David has directed or managed numerous threatened species assessments in Australia and in recent years has increasingly become involved in international work on threatened species.

Across Australia, he has completed numerous projects on threatened species in response to state and commonwealth threatened species legislation. Such legislation includes the NSW *Threatened Species Conservation Act 1995*, Queensland *Nature Conservation Act, 1994* and the Victorian *Flora and Fauna Conservation Guarantee 1998* and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*. International

Dr David Robertson

Director, Cumberland Ecology

threatened species assessments have been completed in Hong Kong, China and Sri Lanka.

Work on threatened species has included preliminary survey and impact assessment, detailed impact assessment and mitigation, monitoring and plans of management.

Provision of Strategic Ecological Advice

Strategic ecological advice has been provided to aid the selection of potential development sites in Australia, Hong Kong, Sri Lanka and China. Examples include: a model to help minimise problems with threatened species issues developed for use by Landcom. Strategic advice about habitat reconstruction and monitoring in the Kam Tin Valley, Hong Kong.

Bushfire Assessments

A range of bushfire assessments have been prepared for sites ranging from small allotments for single dwellings to bushfire management plans for large sites (eg the ADI site at St Marys and Madjura Field Firing Range in the ACT).

Aquatic Assessments

Dr Robertson has written, directed the writing or reviewed numerous wetland ecology projects that involve aquatic habitat assessment, creation and management. Some recent examples include the wetland creation and management projects at the Homebush Olympic Games Venue sites, Coffs Clarence Regional Water Supply Project, the Parramatta Chatswood Rail Link, the proposed extension to Ravensworth East Coal Mine and the Karuah to Buladelah Pacific Highway Upgrade. He has worked on a wide range of large EIS projects that have included assessment of impacts, mitigation and monitoring of wetlands. He has also conducted research into wetland ecology and artificial wetland design while he lectured in aquatic ecology at Charles Sturt University.

Dr Robertson has worked extensively throughout Australia on freshwater ecological projects and has considerable experience with macroinvertebrate biomonitoring following the AUSRIVAS protocol. ERM has facilities in-house to undertake the sorting and identification of freshwater invertebrates and other organisms.

He has also gained experience working in Hong Kong for ERM Hong Kong. His experience includes working

for the KCRC Habitat Creation and Management Plan, assessments of impacts of construction on rare fishes for the West Rail project, development of mapping units for mapping Hong Kong flora and fauna habitats for the SUSDEV project and for the Green Island Ecological assessments.

Dr Robertson is familiar with the West Rail project and has helped write the Habitat Creation and Management Plan. He has visited the sites proposed for the wetland creation project and understands the habitat requirements of the target species such as the Painted Snipe and the Narrow-mouthed Frog.

Statements of evidence and expert testimony

Dr David Robertson is a highly experienced and credible expert witness and is capable of providing expert evidence in both terrestrial and aquatic areas of ecology. David has provided expert evidence for Senate Select Committees, Australian Heritage Commission, Commissions of Inquiry, Land and Environment Court hearings and at Mining Wardens inquiries. He has written numerous affidavits and technical reports for court and regularly presents in court for cross examination. He also assists barristers by writing questions for cross examining expert witnesses in ecology and by taking Judges and Assessors on field inspections of proposed development sites.

Toby Lambert

Senior Project Manager, Cumberland Ecology

□ Toby Lambert

Toby Lambert has extensive experience in ecological and environmental assessment, gained both academically and professionally. At university, he studied the impact of fire regimes on open woodland. Since graduating, he has worked at a senior level in the environmental assessment industry, including at a large consultancy (Conacher Travers) and in his own business. In this capacity, he managed many projects – large and small, complex and simple – and is skilled in all aspects of the ecological survey and assessment process. As a project manager, he supervises all facets of flora and fauna assessment and related reports: planning, supervision of field staff, project scheduling, liaising with clients and Government departments and providing advice of all kinds. He has also been called upon to draft expert evidence for matters at the Land and Environment Court. He has experience in conducting comprehensive fauna surveys and preparing related documentation in a broad array of environments throughout New South Wales. Recent consultancy work has included:

- management of high level flora and fauna investigations for Environmental Impact Assessments
- threatened species investigations
- management of negotiations about the level of mitigation measures required for flora and fauna impacts
- ecological risk assessment

Fields of Competence

- Knowledge of Commonwealth and State Environmental Legislation, including EPBC Act 1999, EP&A Act 1979, TSC Act 1995, FM Act 1994 etc.
- Knowledge of threatened fauna of NSW and fauna surveying methods including the use of arboreal and terrestrial Elliot traps, cage traps, pit traps, hair tubes, owl broadcasters, Anabat system.
- Use of Anabat II hardware and software analysis system for the purpose of identification of microchiropteran bats.

- Able to write complex documents that involve a high level of research, critical analysis and presentation.
- Able to liaise with numerous government departments, clients and the community during preparation of documents and plans.

Education

- Bachelor of Environmental Science. The University of Newcastle, 1996.

Professional Affiliations

- Ecological Consultants Association of NSW
- Royal Zoological Society of NSW
- Frog and Tadpole Study Group

Examples of Key Projects

Biodiversity Surveys

Gosford City Biodiversity Survey

Species Impact Statements

Residential and Golf Course Development, Luddenham

Niangala Close, Austlink Corporate Park

London Place, Grose Wold

Fauna Study

Spring Farm Urban Release Area

Flora and Fauna Constraints Study

Elderslie Urban Release Area

Natural Conservation Values Assessment

The Edge Scenic Protection Lands, Campbelltown

Statements of Environmental Effects

Glenning Road, Glenning Valley

Tumby Road, Bateau Bay

Joseph Banks Drive, Tumby Umbi

Donegal Road, Berkeley Vale

Geoffrey Road, Chittaway Point

Bells Line of Road, North Richmond

Gipps Street and Caddens Road, Claremont Meadows

Plans of Management

Blacktown City Council Reserve No. 787, Glenwood

Blacktown City Council Reserves No. 785 & 786, Glenwood

Northlakes Urban Release Area, Estelville Precinct One

Ecological Plan Of Management

Jenolan Caves Conservation Area

Vegetation Management Plans

Joseph Banks Drive, Tumby Umbi

Penrith Lakes

Brush Creek Road, Brush Creek

Wadalba Community School
Sparks Road, Warnervale
Vegetation & Landscape Management Plan
Bumbera Street, Prestons
Bushland Management Plans
Boundary Road, Avoca
Camden Valley Way, Prestons
Wetland Management Plan
Hadden Farm, Wilberforce
Terrestrial Management Plan
Hadden Farm, Wilberforce
Red Crowned Toadlet Management Plan
Nile Close, Marsfield
Wallum Froglet Assessment Report
Cardiff Greyhound Club, Redhead
Koala Habitat Assessment – various
Port Stephens
Rezoning Assessments
Buttaba Hills Estate, Buttaba
Oakendale Road, Glen Oak
Bungendore Road, Sutton
Ramsgate Estate, Wyee Point
Mulgoa Rd, Mulgoa

Sarah Lunau

Ecologist, Cumberland Ecology

□ Sarah Lunau

Sarah is an ecologist at Cumberland Ecology and is based in Sydney. She has a Bachelor of Science with honours in mangrove ecology.

Previously Sarah was Technical Officer for the Centre for Entomological Research and Insecticide Technology, UNSW. For several years she managed a major commercial project, including experimental design, analysis and reporting.

Sarah has been involved in several projects, both in Australia and overseas, examining human impacts on terrestrial and aquatic fauna. She has experience with surveys of threatened plant and invertebrate species. Currently she is managing several vegetation management plans, including Endangered Ecological Communities, threatened species and ROTAP species. She has developed Feral and Domestic Animal Plans. She provides ongoing assistance with Kangaroo census for the Macquarie Management Plan. She assists with Species Impact Statements.

Field of Competence

- Environment Protection and Biodiversity Conservation Act 1999
- Environmental Impact and Assessment Act (1979) NSW
- Threatened Species Conservation Act (1995) NSW
- Flora and fauna field surveys, aquatic ecology, biological monitoring and environmental impact assessment.
- Geographic Information Systems

Education

- Bachelor of Science (Honours), Australian Catholic University, 1998.

Language:

- English

Examples of Key Projects

(2005) Feral and Domestic Animal Management Plan, Lakewood Subdivision for Stockland Development Company

(2005) Bushland Management Plan, Blaxland for Cityplan

(2005) Fauna Survey, Kemps Creek for David Thomas

(2004) Vegetation Rehabilitation Plan for Regional Park Endangered Ecological Communities for Maryland Development Company

(2004) Flora and Fauna Survey, Oyster Bay for Mick Fornari

(2004) Flora and Fauna Survey, Barden Ridge for Landcom

(2004) Targeted Searches for EPBC listed threatened plant *Pimelea curviflora var curviflora* in Lane Cove National Park. Client James Duignan

(2003-2004) Hypsela Management Plan

Erskine Park – ongoing monitoring and development of management strategies for threatened plant species. Client Austral Bricks

Other Experience

2000/2002 – Australian Catholic University and University of Venice

- Research Assistant

2000 – Australian Catholic University

- Project Leader

1999 – Sydney Water & NPWS

-Consultant

1998 – 1999 Hills Bushcare

-Bush regenerator

1998 – NSW Fisheries

- Researcher

-1997 – Birds Australia

-Volunteer

1997 – University of Technology, Sydney

-Field Assistant

Joanne Ironside

Ecologist, Cumberland Ecology

□ Joanne Ironside

Joanne is an ecologist at Cumberland Ecology and is based in Sydney. She has a Bachelor of Science (Environmental Science) Honours with majors in environmental science and ecology.

She has been involved in flora and fauna surveys, impact assessment and monitoring in terrestrial environments. Currently, she is assisting with several projects including flora and fauna surveys with related Section 5A assessments, and is involved with weed and pest animal management projects and kangaroo management projects.

Fields of Competence

- Environment Protection and Biodiversity Conservation Act 1999
- Environmental Impact and Assessment Act (1979) NSW
- Threatened Species Conservation Act (1995) NSW
- Native Vegetation Conservation Act (1997) NSW
- Biodiversity issues, flora and fauna field surveys, biological monitoring and environmental impact assessment.

Education

- Bachelor of Science (Environmental) Honours. The University of Sydney, 2003.

Languages

- English

Publications

Ironside, J.E. (2003) The establishment of invasive populations of *Pinus radiata* outside plantations. Honours thesis. School of Biological Sciences, The University of Sydney.

Examples of Key Projects

(2004) Tree-survey for proposed golf course and residential development at Medallist Schofields site, Blacktown, NSW. Client SKM.

(2004) Flora and fauna assessment and advisory report at Camden Lakeside Golf Course, NSW. Client CITTA Properties

(2004) Report preparation for peer review of flora and fauna assessment at Leo Drive, Narrawallee site, NSW. Client Hazcorp.

(2004) Flora and fauna assessment at Blueys Beach, Pacific Palms, NSW. Client Guy Walter.

(2004) Guidelines for the Management of Weeds, Feral Animals and Overabundant Native Species on Defence Estate. Client Department of Defence.

(2004) Species Impact Statement for Eastern Precinct Development Stage 1, St Marys Property, NSW. Client Maryland Development Company.

(2004) Flora and Fauna Assessment, Red Gum Rd Pacific Palms, NSW. Client John Dawson.

(2004) Referral for Multiplex site, Burns Rd, Altona, VIC. Client Multiplex.

(2004) Flora and Fauna Assessment, Caravan Head Rd, Oyster Bay, NSW. Client Chanrich Properties.

(2004) Ecological Values Assessment, Dunmore Quarry. Client Boral.

(2004) Flora and Fauna Assessment, Barden Rd, Lucas Heights, NSW. Client Landcom.

(2004) Flora and Fauna Assessment, Gould Pl, Menai, NSW. Client Landcom.

(2004) Species Impact Statement, Referral and Management Plans for Clarence Valley Coffs Harbour Regional Water Supply Project. Client Department of Commerce.

(2005) Flora and Fauna Assessment, Cromer Rd, Cromer, NSW. Client Cromer Golf Club.

(2005) Flora and Fauna Assessment Tropic Gardens Drive, Smiths Lake, NSW. Client Lidbury Summers and Whiteman.

(2005) St Marys Macrofauna Management Plan. Client Maryland Development Company.

(2005) Review of Southern Remnant Report, Mt Owen Coal Mine, NSW. Client Department of Infrastructure, Planning and Natural Resources.

(2005) Species Impact Statement for Wollar-Wellington Transmission Line. Client Transgrid.

(2005) Corridor Management Plan for Glenmore Park Stage 2. Client APP.

(2005) Flora and Fauna Assessment, Brooker Ave Beacon Hill, NSW. Client Vigor Master.

Other Experience

2000-2002 Conservation Volunteers Australia, volunteer on weed removal, fire fuel assessment and mammal population survey projects.

2003 Field assistant to Yvonne Davila (PhD student, School of Biological Sciences, The University of Sydney), pollination systems of *Trachymene incisa*.

Vanessa Bain

Ecologist

Cumberland Ecology

□ Vanessa Bain

Vanessa is an ecologist at Cumberland Ecology and is based in Sydney. She has a Bachelor of Environmental Science, majoring in ecology.

She has been involved in flora and fauna surveys, impact assessment and monitoring in terrestrial environments. Currently, she is assisting with several projects including flora and fauna surveys with related Section 5A assessments, and is involved with riparian management and corridor planning in the Sydney region.

Fields of Competence

- Environment Protection and Biodiversity Conservation Act 1999
- Environmental Impact and Assessment Act (1979) NSW
- Threatened Species Conservation Act (1995) NSW Native Vegetation Conservation Act (1997) NSW
- Biodiversity issues, flora and fauna field surveys, biological monitoring and environmental impact assessment.
- Geographic Information Systems

Education

- Bachelor of Environmental Science, Australian Catholic University, 2004.

Languages

- English

Examples of Key Projects

(2004–2005) Flora and Fauna Impact Assessments to accompany development applications for the St Mary Property (former ADI site). Client: Maryland Development Company

(2004–2005) Species Impact Statement, Referral and Management Plans for Clarence Valley Coffs Harbour Regional Water Supply Project. Client: Department of Commerce.

(2005) Condition Assessments of Cumberland Plain Woodlands at various properties within the Marsden Park Release Area. Clients: SKM and Medallist

(2005) Fauna Survey at Tropic Gardens Drive, Smiths Lake, NSW. Client: Lidbury Summers and Whiteman.

(2005) Determination of the presence of Endangered Ecological Communities in the Blue Mountains. Client: Conroy Surveyors

(2004–2005) Targeted Searches for EPBC and TSC listed threatened plant species throughout Western Sydney. Clients: Maryland Development Company, SKM and Medallist Hold Holdings

(2005) Kangaroo Management (herding), St Mary Property. Client: ComLand

Curriculum vitae - David Thomas

Address 9 Miriam Road, Denistone NSW 2114

Phone & Fax (02) 9874 6581

Email address thomas_surveys@optusnet.com.au

Member of Ecological Consultants Association

Areas of Expertise

- vegetation survey, assessment & mapping
- preparation of management plans for natural areas
- bushland reconstruction, rehabilitation & regeneration planning

Employment History

Environmental Consultant (1994 to present)

- ***Locations of Vegetation Surveys & Assessments*** (as at June, 2003):

Northern Sydney

Bayview, Beacon Hill, Beecroft, Belrose, Buffalo Creek, Castle Cove, Castle Hill, Cheltenham, Church Point, Cowan, Cromer, Denistone, Duffys Forest, Dural, Eastwood, Epping, Glenorie, Gordon, Hornsby, Killara, North Epping, Palm Beach, Ryde (various), St. Ives, Shrimptons Creek, Brush Farm Park), Sydney Harbour NP, Terrey Hills, The Spit, Turramurra, Warriewood, West Pennant Hills, Willoughby

Western Sydney

Agnes Banks, Airds, Auburn LGA, Austral, Badgerys Ck, Berkshire Park, Blacktown, Cattai, Chullora, Doonside, Eastern Creek, Fairfield, Granville, Green Valley, Hoxton Park, Kellyville, Kemps Creek, Kingswood, Kurrajong, Kurmond, Leacock Regional Park, Lidcombe, Marayong, Marsden Park, Milperra, Mt Druitt, Newington, Nth Parramatta, Prestons, Prospect Reservoir, Quakers Hill, Riverstone, Rooty Hill, Rouse Hill development area, Rydalmere, St. Marys, Scheyville NP (part), Schofields, Seven Hills, Villawood, Warragamba, Wedderburn, Werrington

Southern & Eastern Sydney

Alfords Point, Bondi Junction, Calsil Dune (Kurnell), Centennial Park, Coogee, Cronulla, LaPerouse, Matraville, Menai, Menangle, Narellan, Smiths Creek, Voyager Point, Vacluse, Wedderburn, Woronora

Illawarra

American Creek, Avon Water Catchment Area, Bellambi Colliery (Woronora Water Catchment Area), Berkeley, Blue Angle Creek (Gerroa), Bulli Pass, Cataract Water Catchment Area, Cordeaux Heights, Farmborough Heights, Minnamurra, Royal NP, Mt. Keira, Mt. Kembla, Spring Creek (Kiama), Stanwell Tops, Toolijooa, West Dapto, Wilton

Blue Mountains

Bell, Glenbrook-Blackheath, Lapstone, Lawson-Nth Katoomba, Megalong Valley, Springwood, Wentworth Falls, Woodford

Country NSW

Bargo, Brisbane Water NP, Glen Innes, Gosford-Port Stephens, Green Point (Lake Macquarie), HMAS Albatross (Nowra), Hunter Valley (Pokolbin-Scone), Iluka, Kincumber, Lake Munmorah, Menangle Park, Mt Penang, Nattai, Joorilands, Patonga, Picton, Singleton, Tahmoor, Taree, Tuncurry, Werriberri/The Oaks/Oakdale, Woy Woy, Yuragir NP

• *Vegetation Mapping* (of plant community, &/or bushland condition)

Prospect	Eastern Creek
Upper sections of creeks in Fairfield LGA	Singleton Army Training Area
Ryde LGA	Newington
Leacock Regional Park, Casula	Green Point, Lake Macquarie
Taree LGA (eastern half)	Sydney Harbour NP
Flat Rock Ck, Willoughby	Woronora (for DCP)
Voyager Point/Pleasure Point, Kemps Ck and Bonds Ck (in Liverpool LGA)	
Nth Katoomba	Carlton Stud, Picton
Wentworth Falls	Werriberri & Nattai Catchments

• *Management Plans* (including site and impact assessment)

Duffys Forest	Prestons	
Wilton sandstone quarry	Denistone Catchment (Ryde City Council)	
Kemps Ck	Camden Airport	Hoxton Park Airport
In part:	Prospect Reservoir recreational use	
	Flat Rock Ck, Willoughby	Stonequarry Ck, Picton

- ***Bushland Rehabilitation Planning and related work***

- Eastern Suburbs Banksia Scrub at Bondi Junction
- Chullora railway yards bushland corridor
- City of Lithgow
- Blue Mountains sewage treatment plants rehabilitation
- Eastwood; planning & supervision of rehabilitation of railway embankment for City-Rail, and worksites in Brush Farm Park
- Bush regeneration at Royal National Park and Dee Why
- Leader of LEAP (Land Care & Environmental Action Program) team (bush regeneration training component) at Ryde Hospital bushland & Prospect Reservoir
- Plant selection for rehabilitation work for M2 motorway, quarry at Cattai, Lambert - Park, Eastwood and part of Olympic site, Homebush Bay
- Nth Ryde - Epping; identification of soil conditions/types for topsoil storage (for later rehabilitation) during M2 road construction

- ***Other Work:***

Member of Flora Team, Western Sydney Biodiversity Survey, NPWS (1996)

Contract botanical survey for NPWS for: Bargo, Gosford-Port Stephens-Upper Hunter, and Illawarra, Warragamba and Western Sydney mapping surveys

Preparation of Species Impact Statements for sites at Prestons, Bondi Junction, Belrose and Green Valley

Tree surveys for proposed residential developments at Berowra, Carigbar, Coogee, Eastwood, Epping, Nth Epping, Hornsby, Killara, Turramurra, Waitara, West Pennant Hills

Royal National Park - investigation of possible effect of vegetation on road accident

Peer review of vegetation surveys near Murwillumbah and at Darling Mills Ck, Baulkham Hills; Voyager Point, Liverpool; Upper Blue Mountains

Environmental Officer, Sydney Water (1989-1994)

Vegetation surveys throughout Board's area of operations

Plant community mapping and description of Katoomba & Blackheath Water Catchment Areas, & Prospect Reservoir

Preparation & supervision of revegetation & landscape plans for Prospect Reservoir

Supervision of field work for 96 students involved in a six month environmental training program (LEAP)

Selection and project management of bushland restoration projects (Sydney, Illawarra, & Blue Mountains)

Environmental assessment of potential impact of proposed construction works on bushland - including preparation of reviews of environmental factors

Advice on construction site management & restoration

Preparation of environmental management plan for Prospect Reservoir (1989) & later update *Prospect Reservoir Landuse & Environmental Management Plan* (1993)

Publication: *Rainforest Conservation Status in the Metropolitan and Woronora Catchment Areas*. 1990. Water Board - Sydney, Blue Mountains, Illawarra.

Previous work in engineering:

Pumping Engineer (Water Board, 1979-1989)

Technical Inspector (Dept. Labour & Industry, 1977-1978)

Refrigeration/Air Conditioning Mechanic (Royal North Shore Hospital, 1976)

Marine Engineer (Australian & overseas shipping companies, 1969-1976, 1978)

Qualifications & Training

Uncompleted BSc. (University of New England)

Biology

Geography

Identification of Australian Plants

Earth Mapping Technology

Aquatic Ecology

Pollination Biology

Ecology of Disturbed Communities

Australian Rainforests

Plant-Microbe Interactions

Bush Regeneration Certificate TAFE, 1994

First Class Certificate of Competency for Steam & Motor Ships - Ministry of Shipping & Transport, 1974, 1977

Marine Engineering Technology Certificate, TAFE, 1969

Fitting & Machining Apprenticeship, Associated Steamships P/L, 1966-8

NSW Leaving Certificate (Matriculation), 1965

Gabor Vasarhelyi

GIS Consultant

0425 258 674

Gabor@tigrisdesign.com

16 Sarah Crescent

Baulkham Hills 2153

Gabor has a degree in Environmental Science and has seven years experience in the application of GIS to environmental projects. His experience includes training, application development, spatial analysis, satellite image processing and interpretation, technical support and data collection. Application areas of GIS include environmental assessment and asset management.

Gabor has particular experience with the software packages MapInfo, ERMapper, ArcView, and Geomedia.

GIS projects have included work for the mining, transport, ecological, heritage, contaminated sites and planning sectors. Clients include local councils, State Government departments and private industry.

Professional Affiliations and Registrations

- AURISA
- Ecological Society of Australia

Fields of Competence

- Use of Geographic Information Systems for environmental impact assessment
- Management of large GIS projects
- GIS data acquisition, manipulation and presentation
- Database design and management
- Remote sensing
- 3d Visualisations

Education

- Bachelor of Science (Honours) Environmental Science, University of New South Wales



Key Projects

Warkworth Coal Mine Extension EIS, SIS Rolleston Coal Mine EIS

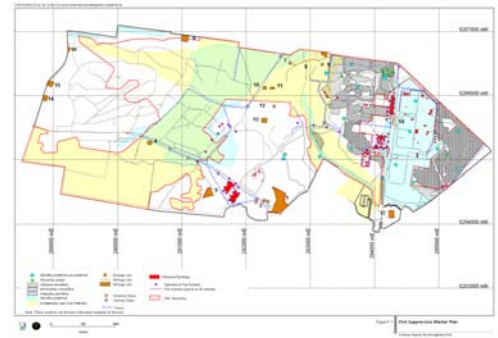
GIS was used as a repository for all the spatial information relating to the projects. It was used to assist the various technical studies needed for these projects, in particular noise, air quality, ecology and heritage assessments. GIS provided visual modelling for visual assessment and also assisted in considering mine planning and transport options. GIS was later used to produce mapping required for the final public document.

3D Visualisation and volume calculation Kiama Quarry Boral. Vertical Mapper was used to generate a DEM of the quarry site at Kiama. From this model volumes could be calculated and new profiles could be visualised. An aerial photograph was draped over the model to help create very realistic 3D rendered scenes.

The model was converted to VRML format for distribution over the internet allowing virtual fly throughs of the quarry.

Wind Farm Visual Assessment

Vertical Mapper was used to assess the likely visual impacts from the construction of a wind farm in south western Victoria. Pole height and local topography were mapped and a viewshed analysis run to determine the visibility of the proposed development in relation to the local townships and tourist areas. A quantitative index was generated and this produced a colourful and readily interpretable assessment, suitable for the client and for public exhibition. Several heights and tower locations were analysed to determine the optimal arrangement.



Flood Risk Modelling, Wyong COAL From a MIKE 11 model data estimating flood heights were overlain with an existing DEM to produce flood risk maps. These were used to estimate potential changes to flood profiles resulting from a proposed mine and associated subsidence.

Satellite Interpretation Iluka Sri Lanka. Landsat 7 multispectral and panchromatic imagery was used to classify landuse in the surrounding hinterland of a proposed mine in Sri Lanka. Satellite data provided a cost effective means to gather data within a remote area.

Vegetation Mapping of Baulkham Hills Shire

Aerial photograph interpretation was used to map the entire 399 square km of the shire. Stereoscope information was combined with registered photographs to resolve vegetation communities of less than half a hectare.

ACT Defence Fire Management Plans Fire potential modelling, using gradient, aspect and fuel load attributes, helped to define appropriate fire management zones for 5 defence sites (including an artillery range) within the ACT. This project also involved the mapping of ecological and heritage assets within the study areas.

ACT Defence Weed Mapping Project. Weed mapping of five defence sites within the ACT for a weed management plan. Data collected was mapped and included into a weed management database.

Lake Macquarie, Glenrock and Tomaree Fire Management Plan, NPWS Hunter. Fire potential modelling using gradient, aspect and fuel load attributes to determine fire management areas for National Parks totalling 2100 hectares. Mapping of assets, and constraints for ecological and heritage items.

Wyong Coal Development, COAL Pty Ltd.

Environmental indicators such as threatened species, borehole data, dust monitor information were compiled on GIS to provide suitable constraints mapping and monitoring for the largest proposed underground coal mine in NSW.

Traffic Database, Willoughby Council.

Digitising and management of traffic data for Willoughby Shire.

This data was used to provide information on the turning movements and parking requirements of the shire. Parking station supply and street parking parameters were designed around the findings of the collected data.

GIS Database, Landcom. Threatened Species distribution in relation to Landcom's holdings. Database compilation and mapping of resulting datasets for non technical constraints analysis by Landcom staff for intended development sites. Landcom is the states largest residential developer.

Clarence Coffs Harbour Regional Water Supply Project, DPWS. Vegetation and Threatened Species Mapping.

Timbarra Gold Mine Species Impact Statement, Ross Mining. Mapping of Threatened species locations and vegetation boundaries for impact assessment.

ADI St Marys Ecological Assessment, Lend Lease. Threatened species and endangered ecological community impact assessment and strategic planning.

Curriculum Vitae

Anthony Saunders

Name: Anthony Stephen John Saunders

Academic Qualifications:

BSc University of Sydney 1976
Dip Ed Sydney Teachers College 1977
PhD (thesis submitted) University of Western Sydney

Fields of expertise:

Bird surveys in the urban and suburban environment.
Remote atlassing.
Native landscaping for bird habitat.
Volunteer co-ordination with non-government organisations.
Environmental education.
Wildlife database design and management.
Management of habitat for terrestrial woodland birds.

Professional positions held:

1995 - 2005	Merops Services. Environmental and landscape consultant and contractor.
1993 - 2004	Part-time lecturer, supervisor and demonstrator, University of Western Sydney (field survey techniques).
2001	Atlas Facilitator, Birds Australia (organising remote atlassing, facilitating data exchange between Birds Australia and state government organisations).
1997	Field Technical Officer, Birds Australia (monitoring breeding success of endangered bird species).
1996	Field Technical Officer, University of Western Sydney (reptile, bird and plant survey techniques and data analysis).
1978 - 1995	High School Science Teacher at Marsden, Heathcote, Penrith and Kingswood High Schools.

Environmental Consultancies:

- 1993 Hawkaid. Flora and Fauna audit of proposed development site for Hawkesbury City Council.
- 1993 Avifauna Survey of proposed addition to Murramurrang N.P. for National Parks Association.
- 1995 Flora and Fauna Audits for EIS Badgery Creek Airport proposal.
- 1997 Eight-part test, Mudgee Shire Council.
- 1999 Flora and Fauna audit and Eight-part test for development application before the Hawkesbury Shire Council.
- 2000 Review of Flora for Fauna Database for Nursery and Garden Industry Australia Ltd.
- 2000 Avifauna Audit and Recommendations for Improving Habitat for Bird Diversity at "Tall Gums", Ottford.
- 2001 Recommendations for providing interim habitat for population of Superb Fairy-wren *Malurus cyaneus* for TransGrid Haymarket Site Redevelopment for CBD Cable project for Transgrid.
- 2001 Avifauna Audit, Bird Habitat Assessment and Recommendations for Improving Habitat for Bird Diversity of Whites Creek Valley Park wetland site for Leichhardt Council.
- 2001 Avifauna Audit and Bird Habitat Assessment of Coombie Station, Roto for Birds Australia.
- 2001 Avifauna Audit, Bird Habitat Assessment and Recommendations for Improving Habitat for Bird Diversity of "Dalton Park" , Dalton.
- 2003 Avifauna Research & Services. Breeding Waterbird Study at Sydney Olympic Park for Sydney Olympic Park Authority.
- 2003 Avian Biodiversity Assessment and Recommendations for Managing Avian Biodiversity in the Leichhardt Local Government Area for Leichhardt Council.
- 2003 Avifaunal surveys of Greystanes Creek Reserve for Holroyd City Council.
- 2003 Recommendations for management of bird habitat in proposed reserve areas at Nelson's Ridge Estate for Delfin Greystanes Pty. Ltd.
- 2004 Technical advice and recommendations in relation to Bird Feeding Policy Report for Leichhardt Council.
- 2004 Avifauna Research & Services. Bush Bird Status in Relation to Site and Surrounding Area at Sydney Olympic Park for Sydney Olympic Park Authority.

- 2004 Avifaunal surveys of several proposed development and adjacent bushland sites at St Marys ADI site for Cumberland Ecology.
- 2004 Avifaunal survey of Cambewarra development site for Cumberland Ecology.
- 2004 Avifaunal surveys of proposed Transgrid power line easement from Wollar to Wellington for Cumberland Ecology.
- 2005 Recommendations for pest bird management and habitat management for promoting bird diversity at CSIRO Prospect development site for Cumberland Ecology.
- 2005 Avifauna Research & Services. Bush Bird Habitat Assessment and Recommendations for Habitat Management at Sydney olympic Park for Sydney Olympic Park Authority.

Other positions held:

- 1999 - 2002 Member of Steering Committee of Birds in Backyards for Birds Australia.
- 1998 - 1999 Consultant to Birds Australia Birds for Birds in Backyards Project.
- 1996 - 2005 Committee CBOC (Cumberland Bird Observers Club Inc.), CBOC representative to Bird Interest Group Network (BIGnet).
- 1997 - 2005 Project Manager for Atlas of Birds of the County of Cumberland.
- 1998 - 2003 Regional Organiser for Sydney and the Blue Mountains, and NSW / ACT Representative on the Steering Committee for the National Bird Atlas for Birds Australia.
- 1997 - 2002 Faunal Advisor for the Hawkesbury Rainforest Network.
- 2002 Representative on NSW NPWS Wildlife Issues Advisory Panel for Birds Australia.

Relevant experience:

Design, build and manage bird database for the birds of the County of Cumberland on behalf of CBOC.

Co-ordinator of volunteers for the CBOC and the Birds Australia national birds atlas. Facilitated the BIGnet data exchange agreement between Birds Australia, NSW Bird Atlassers, Canberra Ornithologists Group and the Cumberland Bird Observers Club.

Presenter at seminars for Bushcare, Local Councils, Landcare and Greening Australia on habitat management for birds and bird survey techniques.

Membership and professional affiliations:

Australian Bird Study Association
Australian Bush Heritage
Birds Australia
Bird Observers Club of Australia
Blue Mountains Conservation Society
Cumberland Bird Observers Club (Records Officer)
Greening Australia
National Centre for Appropriate Technology
NSW Bird Atlassers
Royal Zoological Society (Scientific member)
Stradbroke Island Management Organisation
Wildlife Preservation Society of Queensland

Publications:

Saunders, A.S.J. 1993. Seasonal variation in the distribution of the Noisy Friarbird *Philemon corniculatus* and the Red Wattlebird *Anthochaera carunculata* in eastern New South Wales. Australian Bird Watcher 15: 49-59.

Saunders, A.S.J., Ambrose, S.J. & Burgin, S. 1995. Gape width and prey selectivity in the Noisy Friarbird *Philemon corniculatus* and Red Wattlebird *Anthochaera carunculata*. Emu 95: 297-300.

Saunders, A.S.J. & Burgin, S. 2001. Selective foliage foraging by Red Wattlebirds, *Anthochaera carunculata*, and Noisy Friarbirds, *Philemon corniculatus*. Emu 101: 163-166.

Saunders, A.S.J., Burgin, S. & Jones, H. 2003 The importance of eucalypt nectar in the diet of large honeyeaters. Corella 27: 1-12.

Saunders, T. 1985. Common Bronzewings at Round Hill Nature Reserve. CBOC Newsletter Vol. 6 No. 6 : 5

Saunders, T. 1986. Eastern Bristlebird at Ku-Ring-Gai Chase National Park. CBOC Newsletter Vol. 8 No. 2 : 1

Saunders, T. 1990. Sooty Oystercatcher. CBOC Newsletter Vol. 11 No. 3 : 3

Saunders, T. 1991. Keeping Records of Bird Observations. CBOC Newsletter Vol. 12 No. 5 : 6-7.

Saunders, T. 1997. Birdscaping Gardens CBOC Newsletter Vol. 18 No. 4 : 6

Whelan, H. (ed.) 1997. Australian Geographic Birdwatcher's Journal. Australian Geographic. Chapters 'How to Watch Birds' and 'Bringing Birds into Your Garden'.

Healey, J. (ed.) 1997. Encyclopaedia of Australian Wildlife. Reader's Digest, Sydney. Chapters on Honeyeaters and Chats.

Saunders, T. 2002 Bird Monitoring of Federal Park and White's Creek Valley Park, Annandale. Leichhardt Council, Unpublished Report.

Saunders, T. 2002 Bird Habitat Issues and Management of Urban Bushland. Caring For Our Bushland and Waterways: Forum Proceedings. 2002 Wollondilly Catchment Landcare Forum.



CURRICULUM VITAE

PERSONAL PARTICULARS

NAME: Georgeanna Lynette Story

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Majors Creek NSW 2622

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ACADEMIC QUALIFICATIONS

TERTIARY: Bachelor of Science with Honours, 1994
University of Queensland

SELECTED EMPLOYMENT HISTORY

1999 to Present *Predator Diet Analyst*
Scats About

Research: Various projects related to predator diets in Australia.

Through Scats About I:

- Analyse predator diets;
- Collaborate in research projects;
- Manage Scats About.

1999 to Present *Zoologist*
Robert Wicks Research Centre
Queensland Department of Natural Resources and Mines

Research: Diet of Barn owls in Queensland's channel country.

In this position duties include:

- Analyse owl diets through pellet analysis;
- Analyse data and prepare research papers.

1996 to 1999 *Experimentalist*
National Rabbit Calicivirus Research and Monitoring Program
Robert Wicks Research Centre
Queensland Department of Natural Resources and Mines

Research: The effect of RCD on rabbit populations and the environment in Queensland

In this position duties included:

- Intensive monitoring rabbit population dynamics;
- Broadscale Flora and Fauna monitoring;
- Predator dietary investigation using scat, raptor pellet and stomach analysis;

1995 *Technical Officer*
Mr Russell Palmer
Department of Zoology, University of Queensland

Research: Feral cat ecology in south west Queensland.

In this position duties included:

- Intensive monitoring feral cat population dynamics;
- Fauna surveys;
- Dietary analysis of cats and dingos through scat and stomach examination;

FURTHER RESEARCH EXPERIENCE

1999-2000 *Assistant* to Mr Paul Story with predator dietary and vegetation analysis.
Australian Plague Locust Commission

- Barn owl and Letter-wing kite pellet analysis and Dingo and Feral cat scat analysis;
- Vegetation analysis;
- Paper preparation for publication.

1999-2000 *Assistant* to Dr Don Driscoll with research on reptile ecology in western NSW.
CSIRO Wildlife and Ecology

- Capture and tagging of reptiles in mallee habitat.

1997 *Assistant* to Mrs Shan Lloyd with research on the reproductive
biology of Musky rat kangaroos.
University of Queensland

- Capture and blood sampling of Musky rat kangaroos;
- Revegetation of captive colony enclosures.

1996 *Administrative Assistant* to Ms Noleen Kunst.
Research and Monitoring (Terrestrial) division
Queensland Department of Environment and Heritage

- Administrative duties associated with endangered species management groups.

1996 *Assistant* to Mr Russell Palmer with research on the basic ecology of long -necked turtles and
echidnas in western Queensland.
University of Queensland

- Capture and tagging of long necked turtles and echidnas.

1995 *Assistant* to Mrs Shan Lloyd with research on the reproductive biology of the Big footed bat in
south east Queensland.
University of Queensland

- Capture and blood collection of microbats.

1994 *Assistant* to Mr Steven Priday with research on the stress levels in native rodents in south east
Queensland.
University of Queensland

- Capture, tagging and blood collection of native rainforest rodents.

1994-5 *Assistant* to Dr Robert Clerke with research on the spread of cane toads in the Darling
Downs.
Queensland University of Technology

- Capture and tagging of cane toads.

PUBLICATIONS

Story, G., Berman, D., Palmer, R. and Scanlan, J. (*in press*) The impact of Rabbit Haemorrhagic Disease on wild

rabbit , *Oryctolagus cuniculus*, populations in Queensland. *Wildlife Research*.

Conference Proceedings

Palmer, R., **Cunningham, G.**, Pidcock, S. and Berman, D. (1998). The diet of the red fox pre and post RCD: What is on the menu next? *Australasian Wildlife Management Society Conference*, University of Queensland, Gatton, Queensland.

Palmer, R., **Cunningham, G.**, Moor, D., Pidcock, S and Berman, D. (1998). Monitoring and surveillance of Rabbit Calicivirus Disease (RCD) in Queensland. *Australasian Wildlife Management Society Conference*, University of Queensland, Gatton, Queensland.

Berman, D., Brennan, M., **Cunningham, G.**, Gould, W., Moor, D., Palmer, R. and Pidcock, S. (1997). Is rabbit calicivirus the "knockout punch" for rabbits in the north? *Australasian Wildlife Management Society Conference*, University of New England, Armidale, New South Wales.

Gould, W., **Cunningham, G.**, Palmer, R., Berman, D., Moor, D., and Pidcock, S. (1997). Monitoring and Surveillance of Rabbit Calicivirus in Queensland. *Australasian Wildlife Management Society Conference*, University of New England, Armidale, New South Wales.

Palmer, R. and **Cunningham, G.** (1997). A Successful Breeding by Wedge-Tailed Eagles (*Aquila audax*) in the Channel Country of Far Western Queensland: In the Absence of an Abundant Mammalian Prey Source. *Australasian Wildlife Management Society Conference*, University of New England, Armidale, New South Wales.

Posters

Cunningham, G., Palmer, R., and Pidcock, S. (1998). The diet of the red fox pre and post-RCD. *Australasian Wildlife Management Society Conference*, University of Queensland, Gatton, Queensland.

Gould, W., **Cunningham, G.**, Palmer, R., Berman, D., Moor, D., Brennan, M. and Pidcock, S. (1997). Monitoring and surveillance of rabbit calicivirus in Queensland. *Australasian Wildlife Management Society Conference*, University of New England, Armidale, New South Wales.

REFEREES

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RESUME

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Academic Qualifications:

Advanced Herpetological Techniques course – TAFE Biological Sciences. 1987-1988.

Employment and Experience:

- Extensive herpetological fieldwork mainly in New South Wales for research into the distribution of reptiles for a field guide published in 1990, and also assisting other workers.
- Assistant Instructor Advanced Herp. Techniques course 1989-1992.
- Ten year population survey of the lizard *Eulamprus quoyii*.
- Contract work for Australian Museum Business Services assisting in the review of Fauna Impact Statements (reptiles) prepared for NSW State Forests in the Urbenville, Casino and Walcha/Nundle management areas.
- Reptile/amphibian survey work for AMBS, AES Environmental Consultancy, Countrywide Ecological Service, Charles Sturt University and others in various regions of NSW. 1995-present.
- Co-ordinator of a reptile/amphibian survey of Mutawintji National Park for NPWS by the Australian Herpetological Society and the South Australian Herpetology Group during 1994-1996.
- Co-ordinator of a reptile/amphibian survey of Sturt National Park for NPWS by the Australian Museum and the Australian Herpetological Society during 1997-2000.
- Co-ordinator of a reptile/amphibian survey of Peery National Park for NPWS by the Australian Museum and the Australian Herpetological Society during 2001-present.
- Collection of a series of targeted reptile species on the NSW north-western slopes for the Evolutionary Biology Unit at the Australian Museum, 1997-1998.
- With Prof. Mats Olsson worked on a comparison of reptile species diversity at a 1080 baited area (Yathong Nature Reserve) and a non-baited area. 1999-2001.
- Assisted in a targeted species survey (*Anomalopus mackayi*) on the McIntyre flood plains 1998.
- Carried out surveys for NPWS to assess the distribution of the threatened skink *Egernia margaretae* in New South Wales 2000-2001.
- Editor of the journal Herpetofauna, 1973-2001.

Committees and Honorary positions:

- Associate of the Australian Museum.
- President of the Australian Herpetological Society 1975-1977 and 1995-1998.
- Member of the joint Australian Herpetological Society/Reptile Keepers Association/ NSW National Parks & Wildlife Service working party, revising reptile protection and keeping legislation, 1986-1997, which resulted in the introduction of a reptile keeping system in NSW in 1997.
- Member of the Native Animal Keepers Consultative Committee set up by NPWS to advise the Service and the Minister on matters relating to the keeping of native animals. 1999-present.

Publications

Swan, G. 1971. Notes on the growth of juvenile *Denisonia signata*. *Herpetofauna*, 3(1).

Swan, G. 1972. Observations on birth of Bluetongues. *Herpetofauna*, 5(2).

Swan, G. 1975. Notes on the incubation and hatching of eggs of the Green tree Snake (*Dendrelaphis punctulatus*). *Herpetofauna*, 7(2).

Swan, G. 1988. A note on a winter aggregation of *Lampropholis mustelina*. *Herpetofauna*, 18(1).

Swan, G. 1990. *A Field Guide to the Snakes and Lizards of New South Wales*. Three Sisters Productions, Winmalee. Whitley Award winner-best zoological field guide.

Swan, G. 1995. *A Photographic Guide to Snakes & other reptiles of Australia*. New Holland Publishers, Sydney. (reprinted 1996, 1997, 1999, 2001)

Swan, G. 1997. The Mallee Dragon: Down among the spinifex. *National Parks Journal*, 41(2).

Swan, G. 1998. *A Green Guide to Snakes & other reptiles of Australia*. New Holland Publishers, Sydney. (reprinted 2000, 2001) Whitley Award winner-best zoological series.

Swan, G. 2001. *A Green Guide to Frogs of Australia*. New Holland Publishers, Sydney.

Swan, G. 2003. Wildlife in the West – Mutawintji. *National Parks Journal*, 47(1).

Swan, G. & H. Ehmann 1996. Communal egg-laying in the Broad-tailed gecko (*Phyllurus platurus*). *Herpetofauna*, 26(2).

Swan, G. & R. Foster 2000. Confirmation of occurrence of the skink *Egernia margaretae* in western New South Wales. *Herpetofauna*, 30(2).

Swan, G., G. Shea, & R. Sadlier (2004). *A field guide to reptiles of New South Wales*. New Holland Publishers, Sydney.

Ehmann, H. & G. Swan 1985. *Reproduction and development in the Marsupial frog Assa darlingtoni*, in eds G. Grigg, R. Shine, and H. Ehmann, *The Biology of Australasian Frogs and Reptiles*. Surrey Beatty & Sons, Chipping Norton.

Ehmann, H. & G. Swan 1987. An indirect indicator of mating in snakes. *Herpetofauna*, 17(1).

Ehmann, H. & G. Swan 1987. Microsympatry, limb characteristics and tail colour in burrowing skinks of the genus *Anomalopus*. *Herpetofauna*, 17(2).

Ehmann, H. G. Swan, G. Swan & B. Smith 1991. Nesting, egg incubation and hatching by the Heath Monitor *Varanus rosenbergi* in a termite mound. *Herpetofauna*, 21(1).

Shea, G.M., G. Swan & R. Sadlier 2000. *Ramphotyphlops endoterus* (Waite, 1918), an addition to the typhlopidae fauna of New South Wales. *Herpetofauna*, 30(1).

Wilson, S. & G. Swan 2003. *A complete guide to reptiles of Australia*. New Holland Publishers, Sydney.